

SAFETY DATA SHEET

1. Identification

Product identifier USED ROLL GRIND SWARF

Other means of identification

SDS number KWAR-09

Version # 01

Revision date Not Applicable

Other means of identification

None **Synonyms** Recommended use Waste

Recommended Restrictions Not applicable. **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Kaiser Aluminum Warrick LLC 4000 W. State Route 66 Newburgh, IN 47629

CHEMTREC: +1-703-527-3887 +1-800-424-9300 (24 Hour Emergency Telephone, multiple **Emergency Information**

languages spoken); Kaiser Warrick: +1-877-335-9886 (24 Hour Emergency Telephone, only English

For a current Safety Data Sheet, refer to Kaiser: https://www.kaiseraluminum.com/customer-Website

portal/safety-data-sheets/

2. Hazard(s) identification

Classification

This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

The following statements summarize the health effects generally expected in cases of overexposures. User specific situations should be assessed by a qualified individual. Additional health information can be found in Section 11.

Self-heating substances and mixtures Physical hazards Category 2 **Health hazards** Sensitization, skin Category 1 Category 2 Carcinogenicity

Environmental hazards Not applicable Hazardous to the ozone layer

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Self-heating in large quantities; may catch fire. May cause an allergic skin reaction. Suspected of **Hazard statement**

causing cancer.

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Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Avoid breathing dust/fume/mist. Wear protective gloves/protective clothing. Contaminated work clothing must not be allowed out of the workplace. Keep cool. Protect from

sunlight.

Response If exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If

skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before

reuse

Storage Maintain air gap between stacks/pallets. Store away from other materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Contains nickel. May produce an allergic reaction.

Direct contact: Can cause irritation of the eyes and skin. Can be absorbed through the skin.

Dust and mists: Can cause irritation of the upper respiratory tract.

Non-combustible. Not an explosion hazard. Self-heating in large quantities.

3. Composition/information on ingredients

non-hazardous.

Mixtures

Chemical name	Common name and synonyms	CAS number	%
COOLANT		-	≤6
Triethanolamine		102-71-6	-
Alkanolamine soaps		Not available	-
Alkanolamine borates		Not available	-
2-aminoethanol; ethanolamine		141-43-5	-
SOLIDS		NA	≥94
Iron		7439-89-6	59 - 95
Chromium		7440-47-3	1 - 5.1
Aluminum		7429-90-5	0.2 - 2.0
Molybdenum		7439-98-7	0.1 - 0.7
Manganese		7439-96-5	0.2 - 0.5
Silicon		7440-21-3	0.2 - 0.3
Nickel		7440-02-0	0.15 - 0.25

4. First-aid measures

Eye contact Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.

Skin contact Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops or

persists.

Inhalation Remove to fresh air. Check for clear airway, breathing, and presence of pulse. If breathing is

difficult, provide oxygen. Loosen any tight clothing on neck or chest. Provide cardiopulmonary

resuscitation for persons without pulse or respirations. Consult a physician.

Ingestion Not likely, due to the form of the product.

Most important

symptoms/effects, acute and

delayed

Direct contact: Can cause irritation of the eyes and skin. Prolonged or repeated skin contact may

cause sensitization and allergic contact dermatitis. Can be absorbed through the skin. Dust and mists: Can cause irritation of the upper respiratory tract.

See Section 11 of the SDS for additional information on health hazards.

Medical conditions aggravated Asthma, chronic lung disease, and skin rashes.

by exposure

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

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General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Use fire-extinguishing media appropriate for surrounding materials.

Not available.

Specific hazards arising from

the chemical

Not applicable.

Hazardous combustion

products

Thermal decomposition can generate carbon monoxide, carbon dioxide and oxides of nitrogen.

Special protective equipment and precautions for firefighters Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus

and full protective clothing when appropriate.

General fire hazards

Non-combustible. Not an explosion hazard. Self-heating in large quantities.

Explosion data

Sensitivity to mechanical impact

Not sensitive.

Sensitivity to static

discharge

Not sensitive.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protection recommended in Section 8 of the SDS. Avoid generating dust. Avoid contact with skin and eyes.

Personal precautions, protective equipment and emergency procedures

For emergency responders Use personal protection recommended in Section 8 of the SDS. Avoid generating dust. Avoid

contact with skin and eyes.

Evacuation procedures

Methods and materials for containment and cleaning up Avoid generating dust. Avoid contact with skin and eyes. Pick up mechanically.

Environmental precautions Do not allow to enter drains, sewers or watercourses.

None necessary.

7. Handling and storage

Avoid generating dust. Avoid contact with skin and eyes. Keep away from combustible material. Handling

Wash thoroughly after handling. Do not empty into drains. Use personal protection recommended

in Section 8 of the SDS.

Store away from heat. Protect from direct sunlight. **Storage**

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Туре	Value	Form
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust
Chromium (CAS 7440-47-3)	TWA	1 mg/m3	
Manganese (CAS 7439-96-5)	Ceiling	5 mg/m3	Fume
Molybdenum (CAS 7439-98-7)	TWA	15 mg/m3	Total dust.
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Silicon (CAS 7440-21-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust
US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.1000)		
Components	Туре	Value	Form
2-aminoethanol; ethanolamine (CAS 141-43-5)	PEL	6 mg/m3	
,		3 ppm	
Aluminum (CAS 7429-90-5)	PEL	5 mg/m3	Respirable fraction.

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US. OSHA Table Z-3 (29 CFR 1910.1000)
Components

Aluminum (CAS 7429-90-5)

Form Value Type **TWA** 5 mg/m3 Respirable fraction. 15 mg/m3 Total dust. Total dust. 50 mppcf

15 mppcf

6 ppm

3 ppm

Respirable fraction.

ACGIH

Components **Type** Value **Form** TWA (inhalable Manganese (CAS 0.2 mg/m3 (inhalable fraction) 7439-96-5) fraction) TWA (respirable 0.02 mg/m3 (respirable fraction) fraction)

US ACGIH Threshold Limit Values: Short Term Exposure Limit (STEL): mg/m3 & ppm Components **Type** Value

STEL

2-aminoethanol; ethanolamine (CAS

141-43-5)

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3 & ppm Components **Type**

2-aminoethanol; ethanolamine (CAS

141-43-5)

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

TWA

Components	Туре	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Manganese (CAS 7439-96-5)	TWA	0.1 mg/m3	Inhalable fraction.
,		0.02 mg/m3	Respirable fraction.
Molybdenum (CAS 7439-98-7)	TWA	3 mg/m3	Respirable fraction.
,		10 mg/m3	Inhalable fraction.
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m3	Inhalable fraction.
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m3	

Components	Туре	Value	Form
Aluminum (CAS 7429-90-5)	TWA	3 mg/m3	Respirable fraction
		10 mg/m3	Total dust
Manganese (CAS 7439-96-5)	TWA	0.05 mg/m3	Total dust.
,		0.02 mg/m3	Respirable fraction.
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	

General The need for personal protective equipment should be based upon a hazard assessment and recommendations from health / safety professionals.

Appropriate engineering controls

If dust or mists are generated during processing: Use with adequate ventilation to meet the limits listed in Section 8.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use face shield in case of splash risk.

Skin protection

Hand protection Wear impervious gloves to avoid direct skin contact. Suitable materials: Neoprene or Nitrile

The most suitable glove must be chosen in consultation with the gloves supplier, who can inform

about the breakthrough time of the glove material.

Other Wear suitable protective clothing.

If dust or mists are generated during processing: Use NIOSH-approved respiratory protection as Respiratory protection

specified by an Industrial Hygienist or other qualified professional if concentrations exceed the

limits listed in Section 8. Suitable respiratory protective device recommended: P95.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Follow standard monitoring procedures. **Control parameters**

Environmental exposure

controls

Do not allow to enter drains, sewers or watercourses.

9. Physical and chemical properties

Solid, filter cake. **Form** Color Brown to gray. Odor Not established. **Odor threshold** Not determined рH Not applicable Not determined Density Melting point/freezing point Not determined Initial boiling point and boiling Not determined

range

Not applicable Flash point Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - upper

(%)

Not applicable

Flammability limit - lower

(%)

Not applicable

Explosive properties Not applicable. Vapor pressure Not determined Vapor density Not determined Not determined Relative density

Solubility(ies) Slight

Partition coefficient

(n-octanol/water)

Not determined

Auto-ignition temperature Not applicable **Decomposition temperature** Not available. **Viscosity** Not available.

10. Stability and reactivity

Hazardous polymerization does notoccur. Reactivity

Stable under normal conditions of use, storage, and transportation. **Chemical stability**

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid Heat. Protect against direct sunlight.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon monoxide, carbon dioxide and oxides of nitrogen.

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11. Toxicological information

Health effects associated with ingredients

Triethanolamine: Can cause irritation of eyes and skin. Skin contact: Can cause sensitization. Can be absorbed through the skin. Additional information: Studies with experimental animals have found liver damage and kidney damage. Studies with experimental animals by skin contact have found liver cancer.

Chromium dust and fumes: Can cause irritation of eye, skin and respiratory tract. Metallic chromium and trivalent chromium: Not classifiable as to their carcinogenicity to humans by IARC.

Aluminum dust/fines and fumes: Low health risk by inhalation. Generally considered to be biologically inert (milling, cutting, grinding).

Molybdenum dust and fumes: Can cause irritation of mucous membranes, skin and respiratory tract. Acute overexposures: Can cause headache, backache and sore joints. Chronic overexposures: Can cause deformities of the joints, blood disorders, kidney damage, lung damage and liver damage.

Silicon (inert dusts): Chronic overexposures: Can cause chronic bronchitis and narrowing of airways.

Nickel dust and fume: Can cause irritation of eyes, skin and respiratory tract. Eye contact: Can cause inflammation of the eyes and eyelids (conjunctivitis). Skin contact: Can cause sensitization and allergic contact dermatitis. Chronic overexposures: Can cause perforation of the nasal septum, inflammation of the nasal passages (sinusitis), respiratory sensitization, asthma and scarring of the lungs (pulmonary fibrosis). Nickel alloys IARC/NTP: Reviewed and not recommended for listing by NTP. Listed as possibly carcinogenic to humans by IARC (Group 2B).

Health effects associated with compounds formed during processing

No new/additional compounds are expected to be formed during processing.

Information on likely routes of exposure

Eye contact Direct contact: Can cause irritation.

Direct contact: Can cause irritation. Can be absorbed through the skin. Skin contact

Dust and mists: Can cause irritation of the upper respiratory tract. Chronic overexposures: Can Inhalation

cause respiratory sensitization, scarring of the lungs (pulmonary fibrosis) and central nervous

system damage.

Ingestion Not likely, due to the form of the product.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact: Can cause irritation of the eyes and skin. Can be absorbed through the skin. Dust

and mist: Can cause irritation of the upper respiratory tract.

Information on toxicological effects

Components	Species	Test Results
2-aminoethanol; ethanolan	nine (CAS141-43-5)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	1025 mg/kg
Oral		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg
Aluminum (CAS 7429-90-5	5)	
<u>Acute</u>		
Oral		
LD50	Rat	> 2000 mg/kg
Nickel (CAS 7440-02-0)		
<u>Acute</u>		
Oral		
LD50	Rat	> 9000 mg/kg

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Species Test Results Components

Triethanolamine (CAS 102-71-6)

Acute Dermal

LD50 Rabbit > 20000 mg/kg

Oral

LD50 Guinea pig 5300 mg/kg

> Rat 8 g/kg

Based on available data, the classification criteria are not met. **Acute toxicity** Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eve damage/eve Based on available data, the classification criteria are not met.

irritation

Respiratory or skin sensitization

Based on available data, the classification criteria are not met. Respiratory sensitization

Skin sensitization Contains nickel. May produce an allergic reaction.

Based on available data, the classification criteria are not met. Germ cell mutagenicity

Pre-existing conditions aggravated by exposure Asthma, chronic lung disease, and skin rashes.

May cause cancer. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Chromium (CAS 7440-47-3) 3 Not classifiable as to carcinogenicity to humans.

Nickel (CAS 7440-02-0) 1 Carcinogenic to humans.

Triethanolamine (CAS 102-71-6) 3 Not classifiable as to carcinogenicity to humans.

US OSHA Hazard Categories (10)

Not regulated.

US OSHA Hazard Categories (9)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Nickel (CAS 7440-02-0) Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

Specific target organ toxicity -

repeated exposure

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. **Aspiration hazard**

Components of the product may be absorbed into the body through the skin. **Further information**

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product Species Test Results USED ROLL GRIND SWARF Aquatic EC50 0.6073 mg/l, 48 hours estimated Daphnia Crustacea Fish LC50 Fish 272.1893 mg/l, 96 hours estimated Components **Species Test Results** 2-aminoethanol; ethanolamine (CAS 141-43-5)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 114 - 196 mg/l, 96 hours

(Oncorhynchus mykiss)

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Components		Species	Test Results
Chromium (CAS 7440-47-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.01 - 0.7 mg/l, 48 hours
Fish	LC50	Carp (Cyprinus carpio)	14.3 mg/l, 96 hours
Iron (CAS 7439-89-6)			
Aquatic			
Crustacea	LC50	Cockle (Cerastoderma edule)	100 - 330 mg/l, 48 hours
		Common shrimp, sand shrimp (Crangon crangon)	33 - 100 mg/l, 48 hours
Fish	LC50	Channel catfish (Ictalurus punctatus)	> 500 mg/l, 96 hours
Manganese (CAS 7439-96-5	5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	40 mg/l, 48 hours
Molybdenum (CAS 7439-98-	-7)		
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	800 mg/l, 96 hours
Nickel (CAS 7440-02-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	2.923 mg/l, 96 hours
Triethanolamine (CAS 102-7	'1-6)		
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours
sistence and degradability	No data is av	ailable on the degradability of this product.	
accumulative potential	The product of	does not contain any substances expected t	to be bioaccumulating.

Partition coefficient n-octanol / water (log Kow)

2-aminoethanol; ethanolamine -1.31 Triethanolamine -1

Mobility in soil No data available. Not established. Mobility in general Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Reuse or recycle material whenever possible. If reuse or recycling is not possible, disposal must

be made according to local or governmental regulations.

RCRA Status: Must be determined at the point of waste generation. If material is disposed as a Waste codes

waste, it must be characterized under RCRA according to 40 CFR, Part 261, or state equivalent in

the U.S.

TCLP testing is recommended for Chromium in a waste disposal scenario.

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Dispose of in accordance with local regulations. Contaminated packaging

14. Transport information

General Shipping Information

Basic Shipping Information

UN3088 **ID** number

Proper shipping name Self heating solid, organic, n.o.s. (USED ROLL GRIND SWARF)

Hazard class 4.2 Ш **Packing group**

General Shipping Notes

· Classification applies when exhibiting spontaneous ignition or when meeting the criteria for a "self-heating material" according to the UN Manual of Tests and Criteria and transported in packages with a volume of more than 3 m3 (~3.9 yd3) [re: Figure 33.3.1.3.3.1 in the 5th revised edition of the UN Manual of Test and Criteria].

Alternate Shipping Information

GSI Alternate Basic Shipping Description #1

Basic Shipping Information

ID number

Proper shipping name Not regulated

Hazard class Packing group

Alternate Shipping Notes #1

- Packages less than 3m3 (~3.9 yd3), that are loaded into the same transport vehicle are not regulated (e.g.: 20 individual cubic yard boxes in a trailer or rolloff). Shipping paperwork for units so loaded should reflect number of individual packages and not the
- Regardless of packaging size, material may be considered "Not regulated" based on test results for specific material in question. Contact Kaiser Warrick EHS Services for additional classification review for other than what is provided
- When "Not regulated", enter the proper freight classification, SDS Number and Product Name onto the shipping paperwork.

Disclaimer

This section provides basic classification information and, where relevant, information with respect to specific modal regulations, environmental hazards and special precautions. Otherwise, it is presumed that the information is not available/not relevant

15. Regulatory information

US federal regulations

In reference to Title VI of the Clean Air Act of 1990, this material does not contain nor was it manufactured using ozone-depleting chemicals.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Chromium (CAS 7440-47-3) Listed. Manganese (CAS 7439-96-5) Listed. Nickel (CAS 7440-02-0) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US OSHA Hazard Categories (9)

Not regulated.

US OSHA Hazard Categories (10)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard If particulates are generated Immediate Hazard - Yes categories If particulates are generated Delayed Hazard - Yes

> Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Chromium	7440-47-3	1 - 5.1
Aluminum	7429-90-5	0.2 - 2
Nickel	7440-02-0	0.15 - 0.25

US state regulations

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Nickel (CAS 7440-02-0) Listed: May 7, 2004

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

16. Other information, including date of preparation or last revision

SDS Status Origination date: April 1, 2021.

Disclaimer The information in the sheet was written based on the best

knowledge and experience currently available.

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^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Other information

- Guide to Occupational Exposure Values 2012, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
- NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, September 2005.
- expub, Expert Publishing, LLC., www.expub.com,
- Ariel, 3E Company, www.3Ecompany.com
- NFPA 484, Standard for Combustible Metals (NFPA phone: 800-344-3555)
- NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
- NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
- NFPA 77. Standard for Static Electricity
- Aluminum Association Bulletin TR-2, "Recommendations for Storage and Handling of Aluminum Pigments and Powders." The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.
- Aluminum Association, "Guidelines for Handling Molten Aluminum, The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.
- NFPA 484, Standard for Combustible Metals (NFPA phone: 800-344-3555)
- NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
- NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
- NFPA 77. Standard for Static Electricity
- Aluminum Association's Bulletin F-1, "Guidelines for Handling Aluminum Fines Generated During Various Aluminum Fabricating Operations." The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.
- Aluminum Association, "Guidelines for Handling Molten Aluminum, The Aluminum Association, 1525 Wilson Boulevard, Suite 600. Arlington, Virginia 22209, www.aluminum.org.
- NFPA 484. Standard for Combustible Metals (NFPA phone: 800-344-3555)
- NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
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- NFPA 484, Standard for Combustible Metals (NFPA phone: 800-344-3555)
- NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
- NFPA 70. Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
- NFPA 77, Standard for Static Electricity
- Guide to Occupational Exposure Values-2010, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
- expub, www.expub.com, Expert Publishing, LLC.

*** End of SDS ***

Hazard statement

Self-heating in large quantities; may catch fire. May cause an allergic skin reaction. Suspected of causing cancer.

Precautionary statement

Prevention

Keep cool. Protect from sunlight. Wear protective gloves/protective clothing. Avoid breathing dust/fume/mist. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response

If exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty

of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage

Maintain air gap between stacks/pallets. Store away from other materials.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.



Danger

Supplemental information

Contains nickel. May produce an allergic reaction.

Direct contact: Can cause irritation of the eyes and skin. Can be absorbed through the skin. Dust and mists: Can cause irritation of the upper respiratory tract.

Non-combustible. Not an explosion hazard. Self-heating in large quantities.

FIRE FIGHTING MEASURES:

Use fire fighting methods and materials that are appropriate for surrounding fire.

IN CASE OF SPILL:

Avoid the generation of dusts during clean-up. Avoid contact with skin and eyes. Pick up mechanically. Do not allow to enter drains, sewers or watercourses.

Chemtrec: +1-703-527-3887 +1-800-424-9300 (24 Hour Emergency Telephone, multiple languages spoken)
Kaiser Aluminum Warrick LLC, 4000 State Route 66, Newburgh IN 47629 United States +1-877-335-9886 (24 Hour Emergency Telephone, English only)

