SAFETY DATA SHEET

1. Identification

Product identifier **CAST SKIM PANS**

Other means of identification

SDS number KWAR-21

Version # 01

Revision date Not Applicable

Recommended use Collection receptacle for molten dross from aluminum melting furnaces

Recommended restrictions For industrial use only.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

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

Emergency Information CHEMTREC: +1-703-527-3887 +1-800-424-9300 (24 Hour Emergency Telephone, multiple languages spoken); Kaiser Warrick: +1-877-335-9886 (24 Hour Emergency Telephone, only English spoken)

Website For a current Safety Data Sheet, refer to Kaiser Aluminum website: https://www.kaiseraluminum.com/customer-portal/safety-data-sheets/

2. Hazard(s) identification

Classification

This product is considered 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.

The health effects listed below are not likely to occur unless processing of this product generates dusts or fumes.

Physical hazards	Not classified.	
Health hazards	Specific target organ toxicity, single exposure	Category 1
Environmental hazards	Hazardous to the ozone layer	Not applicable
OSHA defined hazards	Combustible dust	

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement May form combustible dust concentrations in air.

Precautionary statement

Prevention Prevent dust accumulation to minimize explosion hazard.

Response	Not assigned.
Storage	Not assigned.
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. Dust and fume from processing: Can cause irritation of the eyes, skin and respiratory tract. Health effects from elevated temperature processing (e.g., welding, melting): Acute overexposure: Can cause metal fume fever (nausea, fever, chills, shortness of breath and malaise). Non-combustible as supplied. Dust and fines from processing may be ignitable. Heavily concentrated dusts in air can be explosive if subjected to a strong ignition source.

3. Composition/information on ingredients

Composition comments Complete composition is provided below and may include some components classified as non-hazardous.

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Iron		7439-89-6	>98
Manganese		7439-96-5	<1
Chromium		7440-47-3	<0.15
Nickel		7440-02-0	<0.05

Additional Information Additional compounds which may be formed during processing are listed in Section 8.

4. First-aid measures

Eye contact	Dust and fumes from processing: Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.
Skin contact	Dust and fumes from processing: Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops and persists.
Inhalation	Dust and fumes from processing: 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 relevant, due to the form of the product.
Most important symptoms/effects, acute and delayed	Dust and fumes from processing: Can cause irritation of the eyes, skin and respiratory tract. Additional health effects from elevated temperature processing (e.g., welding, melting): Acute overexposure: Can cause metal fume fever. See Section 11 of the SDS for additional information on health hazards.
Medical conditions aggravated by exposure	Dust and fume from processing: Asthma, chronic lung disease, Secondary Parkinson's disease and skin rashes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
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	Otherwise, use fire fighting methods and materials that are appropriate for surrounding fire.
Unsuitable extinguishing media	Contact of molten metal with water or moisture can result in a rapid generation of steam which may produce a violent splattering of molten metal.
Specific hazards arising from the chemical	Heavily concentrated dusts in air can be explosive if subjected to a strong ignition source.
Special protective equipment and precautions for firefighters	Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.
General fire hazards	This product does not present fire or explosion hazards as shipped. Dust and fines from processing may be ignitable.

Explosion data

Sensitivity to mechanical impact	Not sensitive.
Sensitivity to static discharge	Take precautionary measures against static discharges when there is a risk of dust explosion.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid contact with sharp edges or heated metal. Use personal protection recommended in Section 8 of the SDS.

Personal precautions, protective equipment and emergency procedures

For emergency responders	Avoid contact with sharp edges or heated metal. Use personal protection recommended in Section 8 of the SDS.
Evacuation procedures	None necessary.
Methods and materials for containment and cleaning up	Collect scrap for recycling. If molten: Use dry sand to contain the flow of material. All tooling (e.g., shovels or hand tools) and containers which come in contact with molten metal must be preheated or specially coated and approved for such use. Allow the spill to cool before remelting as scrap.

7. Handling and storage

Handling	Avoid generating dust. Keep material dry. Avoid contact with sharp edges or heated metal. Use personal protection recommended in Section 8 of the SDS.
Storage	Store in accordance with local/regional/national/international regulation.
Requirements for Remelting of Scrap Material or Ingot	Contact of molten metal with water or moisture can result in a rapid generation of steam which may produce a violent splattering of molten metal. All tooling and containers which come in contact with molten metal must be preheated or specially coated and approved for such use. Molds and ladles must be preheated or oiled prior to casting. Any surfaces that may contact molten metal (i.e., concrete) should be specially coated.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Chromium (CAS 7440-47-3)	TWA	1 mg/m3	
Manganese (CAS 7439-96-5)	Ceiling	5 mg/m3	Fume
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	

Compounds Formed During Processing	Type	Value	Form
Chromium (III) compounds	TWA	0.5 mg/m3	(as Cr)
Chromium (VI) compounds	TWA	0.0025 mg/m3	Action Level as Cr(VI)
Iron oxide (CAS 1309-37-1)	TWA	10 mg/m3	Fume.
Manganese compounds, inorganic	Ceiling	5 mg/m3	(as Mn) Fume
Nickel compounds, insoluble	TWA	1 mg/m3	(as Ni)

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

Compounds Formed During Processing	Type	Value	Form
Chromium (VI) compounds	TWA	0.005 mg/m3	as Cr(VI)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Compounds Formed During Processing	Type	Value	Form
Magnesium oxide (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.

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

Compounds Formed During Processing	Type	Value	Form
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Magnesium oxide (CAS 1309-48-4)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

ACGIH

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

Compounds Formed During Processing	Type	Value	Form
Chromium (VI) compounds	TWA	0.05 mg/m3	Soluble compounds as Cr

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

Components	Type	Value	Form
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.
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m3	Inhalable fraction.

Compounds Formed During Processing	Type	Value	Form
Chromium (III) compounds	TWA	0.5 mg/m3	
Chromium (VI) compounds	TWA	0.01 mg/m3	Insoluble compounds as Cr
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.
Manganese compounds, inorganic	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.
Nickel compounds, insoluble	TWA	0.2 mg/m3	Inhalable fraction.

Components	Type	Value	Form
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	

Compounds Formed During Processing	Type	Value	Form
Chromium (VI) compounds	TWA	0.25 µg/m3	
Manganese compounds, inorganic	TWA	0.05 mg/m3	Total dust, as Mn.
		0.02 mg/m3	Respirable fraction, as Mn.

Compounds Formed During Processing	Type	Value	Form
Nickel compounds, insoluble	TWA	0.1 mg/m3	Insoluble

Exposure guidelines The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Personnel who handle and work with molten metal should utilize primary protective clothing like polycarbonate face shields, fire resistant tapper's jackets, neck shades (snoods), leggings, spats and similar equipment to prevent burn injuries. In addition to primary protection, secondary or day-to-day work clothing that is fire resistant and sheds metal splash is recommended for use with molten metal. Synthetic materials should never be worn even as secondary clothing (undergarments).

Appropriate engineering controls Dust and fumes from 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.

Skin protection

Hand protection Wear appropriate gloves to avoid any skin injury.
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.

Respiratory protection Dust and fumes from processing: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Suggested respiratory protection: N95.

Thermal hazards Contact with molten material can cause thermal burns.

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

Control parameters

9. Physical and chemical properties

Form Solid.

Color Metallic.

Odor Odorless

Odor threshold Not available.

pH Not applicable

Density 6.00 - 6.50 g/cm3

Melting point/freezing point 2300 - 2550 °F (1260 - 1398.89 °C)

Initial boiling point and boiling range 4800 - 5200 °F (2648.89 - 2871.11 °C)

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - upper (%) Not available.

Flammability limit - lower (%) Not available.

Explosive properties Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies) Insoluble

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions of use, storage, and transportation.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact of molten metal with water or moisture can result in a rapid generation of steam which may produce a violent splattering of molten metal.
Incompatible materials	Bromine, chlorine, fluorine, strong oxidizing agents and strong acids.
Hazardous decomposition products	None known.

11. Toxicological information

Health effects associated with ingredients

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.

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

Iron oxide: Chronic overexposures: Can cause benign lung disease (siderosis). Ingestion: Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of the body fluids (metabolic acidosis) and liver damage.

Magnesium oxide fumes: Can cause irritation of the eyes and respiratory tract. Acute overexposures: Can cause metal fume fever (nausea, fever, chills, shortness of breath and malaise).

Manganese compounds: Chronic overexposures: Can cause inflammation of the lung tissues, scarring of the lungs (pulmonary fibrosis), central nervous system damage, Secondary Parkinson's Disease and reproductive harm in males.

Chromium (III) compounds: Can cause irritation of eye, skin and respiratory tract. IARC/NTP: Not classifiable as to their carcinogenicity to humans by IARC.

Hexavalent chromium compounds (Chromium VI): Can cause irritation of eye, skin and respiratory tract. Skin contact: Can cause irritant dermatitis, allergic reactions and skin ulcers. Chronic overexposures: Can cause perforation of the nasal septum, respiratory sensitization, asthma, the accumulation of fluid in the lungs (pulmonary edema), lung damage, kidney damage, lung cancer, nasal cancer and cancer of the gastrointestinal tract. IARC/NTP: Listed as "known to be a human carcinogen" by the NTP. Listed as carcinogenic to humans by IARC (Group 1).

Nickel compounds: Associated with lung cancer, cancer of the vocal cords and nasal cancer. IARC/NTP: Listed as "known to be a human carcinogen" by the NTP. Listed as carcinogenic to humans by IARC (Group 1).

Information on likely routes of exposure

Eye contact	Dust and fumes from processing: Can cause irritation.
Skin contact	Dust and fumes from processing: Can cause irritation. Prolonged or repeated skin contact may cause sensitization.
Inhalation	Dust: Can cause irritation of the upper respiratory tract. Chronic overexposures: Can cause respiratory sensitization. Additional health effects from elevated temperature processing (e.g., welding, melting): Dust and fumes: Can cause irritation of the respiratory tract. Acute overexposure: Can cause metal fume fever (nausea, chills, fever, shortness of breath and malaise). Chronic overexposures: Can cause respiratory sensitization, benign lung disease (siderosis), the accumulation of fluid in the lungs (pulmonary edema), scarring of the lungs pulmonary fibrosis, central nervous system damage, secondary Parkinson's disease, reproductive harm in males and lung cancer.

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

Symptoms related to the physical, chemical and toxicological characteristics Dust and fumes from processing: Can cause irritation of the eyes, skin and respiratory tract. Additional health effects from elevated temperature processing (e.g., welding, melting): Acute overexposure: Can cause metal fume fever.

Information on toxicological effects

Components	Species	Test Results
Nickel (CAS 7440-02-0)		
Acute		
Oral		
LD50	Rat	> 9000 mg/kg

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Respiratory sensitization Based on available data, the classification criteria are not met. Contains nickel. May produce an allergic reaction.

Skin sensitization Based on available data, the classification criteria are not met. Contains nickel. May produce an allergic reaction.

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

Pre-existing conditions aggravated by exposure Dust and fume from processing: Asthma, chronic lung disease, Secondary Parkinson's disease and skin rashes.

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

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.

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.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity This material is not expected to be harmful to aquatic life.

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

Components		Species	Test Results
Fish	LC50	Channel catfish (Ictalurus punctatus)	> 500 mg/l, 96 hours
Manganese (CAS 7439-96-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	40 mg/l, 48 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

Persistence and degradability The product solely consists of inorganic compounds which are not biodegradable.

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Mobility in soil Not considered mobile.

Other adverse effects None known.

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.

Waste codes RCRA Status: Not federally regulated in the U.S. if disposed of "as is."
RCRA waste codes other than described here may apply depending on use of the product. Status must be determined at the point of waste generation. Refer to 40 CFR 261 or state equivalent in the U.S.

Waste from residues / unused products If reuse or recycling is not possible, disposal must be made according to local or governmental regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

General Shipping Information

Basic Shipping Information

ID number -

Proper shipping name Not regulated

Hazard class -

Packing group -

General Shipping Notes

• 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 categories	Immediate Hazard - Yes	If particulates/fumes generated during processing.
	Delayed Hazard - Yes	If particulates/fumes generated during processing.
	Fire Hazard - No	
	Pressure Hazard - No	
	Reactivity Hazard - No	

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Manganese	7439-96-5	<1

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	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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).

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.

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
- 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
- NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
- NFPA 77, Standard for Static Electricity

Key/Legend:

ACGIH	American Conference of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstract Services
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CPR	Cardio-pulmonary Resuscitation
DOT	Department of Transportation
DSL	Domestic Substances List (Canada)
EC	Effective Concentration
ED	Effective Dose
EINECS	European Inventory of Existing Commercial Chemical Substances
ENCS	Japan - Existing and New Chemical Substances
EWC	European Waste Catalogue
EPA	Environmental Protective Agency
IARC	International Agency for Research on Cancer
LC	Lethal Concentration
LD	Lethal Dose
MAK	Maximum Workplace Concentration (Germany) "maximale Arbeitsplatz-Konzentration"
NDSL	Non-Domestic Substances List (Canada)
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PIN	Product Identification Number
PMCC	Pensky Marten Closed Cup
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SIMDUT	Système d'Information sur les Matières Dangereuses Utilisées au Travail
STEL	Short Term Exposure Limit
TCLP	Toxic Chemicals Leachate Program
TDG	Transportation of Dangerous Goods
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act TWA Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System
m	meter,
cm	centimeter,
mm	millimeter,
in	inch,
g	gram,
kg	kilogram,
lb	pound,
µg	microgram,
ppm	parts per million,
ft	feet

*** End of SDS ***

CAST SKIM PANS

KWAR-21

Hazard statement

May form combustible dust concentrations in air.

Precautionary statement

Prevention

Prevent dust accumulation to minimize explosion hazard.

Response

Not assigned.

Storage

Not assigned.

Disposal

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

Warning

Supplemental information

Contains nickel. May produce an allergic reaction.
Dust and fume from processing: Can cause irritation of the eyes, skin and respiratory tract. Health effects from elevated temperature processing (e.g., welding, melting): Acute overexposure: Can cause metal fume fever (nausea, fever, chills, shortness of breath and malaise).

Non-combustible as supplied. Dust and fines from processing may be ignitable. Heavily concentrated dusts in air can be explosive if subjected to a strong ignition source.

FIRE FIGHTING MEASURES:
Otherwise, use fire fighting methods and materials that are appropriate for surrounding fire. Contact of molten metal with water or moisture can result in a rapid generation of steam which may produce a violent splattering of molten metal.

IN CASE OF SPILL:
Collect scrap for recycling.
If molten: Use dry sand to contain the flow of material. All tooling (e.g., shovels or hand tools) and containers which come in contact with molten metal must be preheated or specially coated and approved for such use. Allow the spill to cool before remelting as scrap.

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KAISER ALUMINUM WARRICK