

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data Sheet

Revision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1

CHUCK GREASE PRO

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : CHUCK GREASE PRO
Company Name : KITAGAWA IRON WORKS CO., LTD.
Address : 726-8610,77-1 Motomachi, Fuchu-city, Hiroshima-pref.,JAPAN
Phone Number : 0847-40-0529
Product Code : 04085496
Emergency Telephone Number : 0847-40-0533(Quality Control Section)

2. HAZARDS IDENTIFICATION

GHS Classification : Specific target organ toxicity - repeated exposure (oral): Category 2 (kidney)

GHS Label Elements

Pictogram or Symbol :



Signal Word : Warning

Hazard Risk Statement : May cause damage to organs (kidney) through prolonged or repeated exposure if swallowed.

Precautionary Statement

Prevention :

Avoid contact with skin and eyes.
Use only outdoors or in a well-ventilated area.

Response :

In case of fire and/or explosion do not breathe fumes.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
Get medical attention/advice if you feel unwell.

Storage :

Not applicable.

Disposal :

Dispose of in accordance with local regulations.

Other Hazard :

None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization :

Mixture

Generic Name :

Inorganic and organic compounds in mineral oil

Ingredients and Contents

<u>CAS Number</u>	<u>ENCS Number</u>	<u>Chemical formula</u>	<u>Wt %</u>	<u>Component Name</u>	<u>GHS Classification</u>
64742-54-7	(9)-1692	-	50 - 60	Hydrotreated heavy paraffinic petroleum distillate	-
37640-57-6	(5)-1024/(5)-1038	-	10 - 20	Melamine cyanurate	Acute toxicity (Oral): Category 5 Specific target organ toxicity - repeated exposure (Oral): Category 2 (kidney)
13463-67-7	(1)-558	TiO ₂	1 - 10	Titanium dioxide	-
68412-26-0	(2)-2183	-	1 - 10	Molybdenum compound	-

Comments :

This product contains the above chemical(s) listed by Japanese regulations and/or classified and containing not less than cut-off value by GHS.

4. FIRST AID MEASURES

In Case of Inhalation :

No first aid should be needed.

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data SheetRevision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1**CHUCK GREASE PRO**

- In Case of Skin Contact** : Wash off with soap and water.
In Case of Eye Contact : Immediately flush with water.
In Case of Ingestion : Get medical attention.
Comments : Treat according to person's condition and specifics of exposure.

Possible Acute and Chronic Health Effect:Acute

- Eyes** : Direct contact may cause temporary redness and discomfort.
Skin : No significant irritation expected from a single short-term exposure.
Inhalation : No significant effects expected from a single short-term exposure.
Ingestion : Low ingestion hazard in normal use.

Chronic

- Skin** : Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.
Inhalation : No known applicable information.
Ingestion : Overexposure by ingestion may injure the following organ(s): kidney.
Other Health Hazard Information : Inhalation of fumes from fire decomposition of polytetrafluoroethylene (Teflon) is known to cause polymer fume fever.

- Important Symptoms and Hazard Effects** : No significant adverse effects from normal use.

- Personal Protection for First Aid or Rescue Personnel** : No respiratory protection should be needed. Use proper protection - safety glasses as a minimum. Washing at mealtime and end of shift is adequate.

- Note to physicians** : Treat symptomatically. For further information, the medical practitioner should contact
KITAGAWA IRON WORKS CO., LTD.

The above listed potential effects of overexposure are based on actual data, the results of studies performed upon similar compositions, component data, and/or expert review of the products.

5. FIRE-FIGHTING MEASURES

- Extinguishing Media** : On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
Unsuitable Extinguishing Media : None established.
Specific Hazards during Fire : None.
Specific Fire Fighting : Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Protection for Fire-fighter : Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions, Protective Equipment and Emergency Procedures** : Avoid skin and eye contact. Do not take internally. Please refer to section 8 Protective equipment.
Environmental Precautions : Do not allow large quantities to enter drains or surface waters.
Recovery and Neutralization/ Methods and Materials for Containment and Cleaning up : Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Wipe up or scrape up and contain for salvage or disposal. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which laws and regulations are applicable.

7. HANDLING AND STORAGE

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data Sheet

Revision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1

CHUCK GREASE PRO

Handling

- Technical Measures** : Use with adequate ventilation. At temperatures above 482 degrees F/250 degrees C, this material may produce highly toxic gaseous compounds such as hydrogen fluoride and perfluorohydrocarbons. Provide adequate ventilation or use the appropriate respiratory protection, if the possibility of exceeding 482 degrees F/250 degrees C exists. Avoid contamination of tobacco products. Fluoropolymers on tobacco goods may cause adverse health effects by inhalation of the decomposition products. Employees should wash their hands and face before eating, drinking or using tobacco products.
- Local and General Ventilation** : Please refer to section 8 Ventilation.
- Precautions** : Avoid skin and eye contact. Do not take internally.
- Safe Handling Advice** : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- Avoidance of Contact** : Please refer to section 10 Conditions to Avoid and Materials to Avoid.

Storage

- Technical Measures and Storage Conditions** : Use reasonable care and store away from oxidizing materials.
- Packaging Material** : None established.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Concentration Control Notification #79 from Ministry of Labor
None known.

Industrial Hygiene Standards

<u>Component Name</u>	<u>Exposure Limits</u>
Hydrotreated heavy paraffinic petroleum distillate	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5 mg/m3; ACGIH STEL 10 mg/m3.
Titanium dioxide	Japan Association on Industrial Health Guideline (2007): TWA 1 mg/m3 Respirable dust. TWA 4 mg/m3 Total dust. Observe titanium dioxide limits. OSHA PEL (final rule): TWA 15 mg/m3 and ACGIH TLV: TWA 10 mg/m3.
Molybdenum compound	OSHA PEL, as molybdenum: TWA 15 mg/m3 total dust, 5 mg/m3 respirable fraction. ACGIH TLV, as molybdenum: TWA 10 mg/m3.

Engineering Measures

- Local Ventilation** : None should be needed.
- General Ventilation** : Recommended.

Personal Protective Equipment

Personal Protective Equipment for Routine Handling

- Respiratory protection** : No respiratory protection should be needed.
- Suitable Respirator** : None should be needed.
- Hand protection** : Chemical protective gloves should be worn where repeated or prolonged contact can occur.
- Eye protection** : Use proper protection - safety glasses as a minimum.
- Skin protection** : Washing at mealtime and end of shift is adequate.
- Hygiene Measures** : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

Personal Protective Equipment for Spills

- Respiratory protection** : No respiratory protection should be needed.
- Eye protection** : Use proper protection - safety glasses as a minimum.
- Skin protection** : Washing at mealtime and end of shift is adequate.

Precautionary Measures

Comments

- At temperatures above 482 degrees F/250 degrees C, this material may produce highly toxic gaseous compounds such as hydrogen fluoride and perfluorohydrocarbons.

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data SheetRevision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1**CHUCK GREASE PRO**

Provide adequate ventilation or use the appropriate respiratory protection, if the possibility of exceeding 482 degrees F/250 degrees C exists. Avoid contamination of tobacco products. Fluoropolymers on tobacco goods may cause adverse health effects by inhalation of the decomposition products. Employees should wash their hands and face before eating, drinking or using tobacco products.

Note : These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	
Form	: Paste
Color	: White to light yellow
Odour	: Some odor
pH	: Not determined.
Melting point/Freezing Point	: Not determined.
Boiling point, Initial Boiling Point, and Boiling Range	: Not determined.
Flash Point	: > 200 °C(Cleveland Open Cup)
Characteristics of Explosives	: Not determined.
Vapor Pressure @ 25°C	: Not determined.
Vapor Density (air=1)	: Not determined.
Specific Gravity	: 1.12 g/cm ³
Solubility	: Not determined.
Octanol/water partition	: Not determined.
Autoignition Temperature	: Not determined.
Decomposition Temperature	: Not determined.
Odour Threshold	: Not determined.
Evaporation Rate	: Not determined.
Flammability (solid, gas)	: Not applicable.
Viscosity	: Not determined.

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

Stability	: Stable.
Possibility of Hazardous Reactions	: Hazardous polymerization will not occur.
Conditions to Avoid	: None.
Materials to Avoid	: Can react with strong oxidising agents.
Hazardous Decomposition Products	: Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Nitrogen oxides. Fluorine compounds. Metal oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity**

<u>Component Name</u>	<u>Acute Toxicity</u>
Melamine cyanurate	LD50: 2,500 mg/kg - Oral Rat

Skin Corrosion/ Irritation	: Please refer to Section 3 and Section 4 Health Effect.
Serious Eye Damage/ Irritation	: Please refer to Section 3 and Section 4 Health Effect.
Respiratory Organs Sensitization or Skin	: Please refer to Section 3 and Section 4 Health Effect.

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data SheetRevision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1**CHUCK GREASE PRO**

- Sensitization**
- Germ Cell Mutagenicity** : Please refer to Section 3, Section 4 Health Effect and Section 15 ISHL Mutagen Substance.
- Carcinogenicity** : Please refer to Section 3, Section 4 Health Effect and Section 15 ISHL Carcinogen Substance.
- Reproductive Toxicity** : Please refer to Section 3 and Section 4 Health Effect.
- Specific Target Organ.** : Please refer to Section 3 and Section 4 Health Effect.
- Systemic Toxicity (Single Exposure)**
- Specific Target Organ.** : Please refer to Section 3 and Section 4 Health Effect.
- Systemic Toxicity (Repeated Exposure)**
- Aspiration Hazard** : Please refer to Section 3 and Section 4 Health Effect.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Environmental Effects**

- Acute** : No adverse effects on aquatic organisms are predicted.
- Chronic** : No adverse effects on aquatic organisms are predicted.

- Fate and Effects in Waste Water Treatment Plants** : No adverse effects on bacteria are predicted.

Persistence and Degradability

- Water** : Solid material, insoluble in water.

Bioaccumulative Potential

- Bioaccumulation** : No bioaccumulation potential.

Mobility in Soil

- : This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.

Additional Environmental Information

- : No specific information is available.

13. DISPOSAL CONSIDERATIONS

- Residual Waste** : This product falls under Industrial Waste based on Wastes Disposal and Public Cleansing Law. Dispose of in accordance with local regulations.
- Contaminated Containers or Packaging** : Dispose of in accordance with local regulations.
- Note** : None.

14. TRANSPORT INFORMATION

- Local Regulations** : Refer to Section 15.

International Regulations**Sea Transport (IMDG)**

Not subject to IMDG code.

Air Transport (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION

KITAGAWA IRON WORKS CO., LTD.
Material Safety Data Sheet

Revision Date : 2013/03/21
MSDS No : 04085496
MA0655PHG1

CHUCK GREASE PRO

Law Concerning Examination and Regulation of Manufacture, etc. of Chemical Substances : This product is not applied into the code about Specified Chemical Substances, Monitoring Chemical Substances and Priority Assessment Chemical Substances.

Industrial Safety and Health Law

Notification Substance	Specific Number	Notification Component(s)	Wt %
	168	Mineral oil	50 - 60
	191	Titanium oxide	1 - 10
	603	Molybdenum and its compounds	1 - 10

Indication Substance : Not applicable.

Ordinance on Prevention of Organic Solvent Poisoning : Not applicable.

Ordinance on Prevention of Hazards due to Specified Chemical Substances : Not applicable.

Ordinance on Prevention of Lead Poisoning : Not applicable

Ordinance on Prevention of Tetraalkyl Lead Poisoning : Not applicable

Hazardous Material Banned Substance : Not applicable

Mutagen Substance : Not applicable.

Carcinogen Substance : Not applicable.

High Pressure Gas Safe Law : Not applicable.

Fire Service Law : DESIGNATED FLAMMABLE SUBSTANCES, OTHER PLASTICS (3,000kg)

Poisonous and Deleterious Substance Control Law : Not applicable.

Pollutant Release and Transfer Register : Not applicable.

Marine Pollutant Prevention Law : Not Classified as a Marine Pollutant

Chemical Inventories

TSCA	: Not determined.
ENCS/ISHL	: All components are listed on ENCS/ISHL or its exempt rule.
EINECS	: Not determined.
KECL	: Not determined.
DSL	: Not determined.
PICCS	: Not determined.
AICS	: Not determined.
IECSC	: Not determined.

16. OTHER INFORMATION

Bibliography: Statue book of chemicals, Internal Technical Data and others

These data are offered in good faith as typical values and not as product specifications. They are believed accurate as of the date of this Material Safety Data Sheet based on a review of current composition and information supplied by vendors. No warranty,

KITAGAWA IRON WORKS CO., LTD.
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Revision Date : 2013/03/21
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either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. This Product has been developed and manufactured for general industrial use. For medical use, or other uses where safety considerations may be required, you must in advance test and review the safety of your intended application. Moreover, this Product is not for human implant nor human injection, nor use for applications which may present risk of accumulating inside human bodies.

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