MATERIAL SAFETY DATA SHEET

Revised date: 04/07/2017

1. PRODUCT NAME AND IDENTIFICATION

Product Name: JCP 211 AQUA GREASE II
Chemical Name & Synonyms: N/A
CAS Number: N/A, Mixture
Company Name: JCP GROUP(THAILAND) CO., LTD.
Tel & Fax.: +(66)34-410-824 **Emergency**: +(66)85-105-6034

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	% by Wt.	OSHA TWA (ppm)	ACGIH-TWA (ppm)
SODIUM METASILICATE	10213-79-3	5-10%	N/A	N/A
ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE)	111-76-2	1 – 5%	N/A	N/A
SODIUM DODECYLBENZENE SULFONATE	25155-30-0	1 – 5%	N/A	N/A

3. HAZARDS IDENTIFICATION

Emergency overview: Can cause irritation or damage to eyes and skin. Harmful if swallowed.
Routes of Exposure: Inhalation: [✓] Ingestion: [✓] Absorption: [✓]
Eyes: Causes irritation and, with extended contact, burns. Can result in severe damage.
Skin: Causes irritation with reddening and itching.
Ingestion: Causes irritation to the mucous membranes or other tissues contacted.
Inhalation: Irritating to the respiratory tract.
Carcinogenicity: Contains no listed carcinogens.

4. FIRST AID MEASURES

Eyes: Flush with clean cool water for 15 minutes holding eyelids open. See a physician immediately.
Skin: Immediately flush skin with plenty of water while removing contaminated clothing and boots. See a physician.
Ingestion: Drink plenty of water or milk. Do not induce vomiting. See a physician immediately.
Inhalation: Remove to fresh air. If not breathing give artificial respiration. See a physician

5. FIRE FIGHTING MEASURES

Hazardous Combustion Products: If dried residues of this product are heated, they may release hydrogen gas which could create an explosion hazard.
General Hazards: No hazards to be specially mentioned.
Extinguishing Media: Water, ABC dry chemical.
Fire Fighting Instructions: Normal firefighting procedures apply. Self-contained breathing apparatus should be worn.
Other Information

Flash Points: > 93 °C
Autoignition Temperature: Not Applicable
Flammability Limits in Air (% by volume): Not Applicable

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6. ACCIDENTAL RELEASE (SPILL MEASURES)

Personal precautions: No conditions to be specially mentioned.
Environmental precautions: Do not allow material to contaminate ground water system. Prevent product from entering drains.
Methods for cleaning up / Methods for containment: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Keep in suitable, closed containers for disposal. Contaminated surfaces will be extremely slippery.
Additional advice: For personal protection see section 8.

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7. HANDLING AND STORAGE

Handling
Advice on safe handling: For personal protection see section 8. No special handling advice required.
Advice on protection against fire and explosion: Normal measures for preventive fire protection.
Storage
Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Do not freeze.
Advice on common storage: No special restrictions on storage with other products.
Other data: No decomposition if stored and applied as directed.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Good general ventilation.
Eye Protection: Chemical goggles with face shield.
Skin Protection: Neoprene or natural rubber gloves
Respiratory Protection: Use only NIOSH/MSHA approved respiratory protection if exposure guideline might be exceeded.
Other Protective Equipment: As required to minimize skin contact. Eye wash, safety shower
Exposure Guidelines: None established

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9. PHYSICAL AND CHEMICAL PROPERTIES (Typical)

Appearance and Odor: amber liquid, slight characteristic odor.

pH: 12 – 12.4
Melting point/range: 0 °C
Boiling point/boiling range: 100 °C
Flash point: N/A
Ignition temperature: N/A
Evaporation rate: N/A
Vapor pressure: 16.47 mmHg
Relative vapor density: 0.6
Density: 1,050 kg/m3 at 25 °C
Relative density: 1.05 at 25 °C
Water solubility: Complete
Solubility in other solvents: N/A

Flammability (solid, gas): N/A
Lower explosion limit: 1.1%
Upper explosion limit: 10.6%
Auto-ignition temperature: N/A
Decomposition temperature: N/A
Partition coefficient: N/A
Viscosity, dynamic: N/A
Viscosity, kinematic: N/A
Explosive properties: Not explosive
Oxidizing properties: The substance or mixture is not classified as oxidizing.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid: Avoid temperatures above 60°C, direct sunlight and contact with sources of heat.
Materials to avoid: Mild steel, Oxidizing agents
Hazardous decomposition products: No hazardous decomposition products are known.
Thermal decomposition: No data available
Reactivity: Stable under normal conditions.
Chemical stability: Stable under recommended storage conditions.
Hazardous reactions: No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

SCAQMD information. Vapor pressure of the VOC component: 0.6 mmHg @ 20°c. The VOC component is not photochemically reactive. VOC content: 3.8% by weight; 4.4% by volume; 39.7 g/l

SODIUM METASILICATE
ORL-RAT LD50: 847 mg/kg 3.

ETHYLENE GLYCOL MONOBUTYL ETHER
ORL-RAT LD50: 470 mg/kg 3.
SKN-RBT LD50: 220 mg/kg 3.
SKN-RBT (OPEN): 500 mg mild 3.
EYE-RBT SDT: 100 mg severe 3.
IHL-RAT LC50: 450 ppm/4h 3.
IHL-RAT TCLO: 100 ppm/6h (6-18d preg): TER 3.

Although the listed effects were observed in laboratory animals upon inhalation of this material, studies have also suggested that there is little possibility of significant adverse health effects in humans exposed in the workplace to levels that comply with the osha permissible exposure limit of 50 ppm. At 100 ppm some subjective complaints were seen in sensitive individuals, and even at 200 ppm the primary complaint was irritation. This appears to be one of the few materials to which the human is more resistant than the usual experimental animals. 4. Inhalation exposure to ethylene glycol monobutyl ether produced some evidence of cancer in mice in a long-term bioassay, no evidence of cancer in male rats and equivocal evidence in female rats. 5.

SODIUM DODECYL BENZENE SULFONATE
ORL-RAT LD50: 438 mg/kg 3.
SKN-RBT SDT: 20 mg/24h moderate 3.
EYE-RBT SDT: 250 ug/24h severe 3.
ORL-RAT LDLo: 3040 mg/kg/30d-c liver effects 3.

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment
Additional ecological information: None known.
Elimination information (persistence and degradability)
Bioaccumulation: Bioaccumulation is unlikely.
Mobility: No data available
Biodegradability: Result: Not readily biodegradable.
Further information on ecology
Biochemical Oxygen Demand (BOD): No data available.

13. DISPOSAL CONSIDERATIONS

Dispose of in an approved hazardous waste container. Dispose must comply with local state and federal regulations with respect to disposal or discharge.

14. TRANSPORT INFORMATION

International Regulation
ADR: Not regulated as a dangerous good
UNRTDG: Not regulated as a dangerous good
IATA-DGR: Not regulated as a dangerous good
IMDG-Code: Not regulated as a dangerous good
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable for product as supplied.
Further information for transport: Not classified as dangerous in the meaning of transport regulations.
NCh 2190/382: Not regulated as a dangerous good
Land transport: Not regulated as a dangerous good.
DOT Description: Not regulated as a dangerous good.

15. REGULATORY INFORMATION

Notification status explanation

CH INV	Switzerland. New notified substances and declared preparations	[ ]
TSCA	United States TSCA Inventory	[✓]
DSL	Canadian Domestic Substances List (DSL)	[✓]
AICS	Australia Inventory of Chemical Substances (AICS)	[✓]
NZIoC	New Zealand. Inventory of Chemical Substances	[✓]
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory	[✓]
ISHL	Japan. ISHL - Inventory of Chemical Substances	[✓]
KECI	Korea. Korean Existing Chemicals Inventory (KECI)	[ ]
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	[ ]
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)	[ ]

16. OTHER INFORMATION

The above information is based on data available to us and is believed to be correct. However, no warranty, merchantability, fitness for any use or any other warranty is expressed or to be implied regarding the accuracy of these data, the result to be obtained from the use thereof, the hazards connected with the use of the material, or that any such use will not infringe any patent. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility resulting from its use. This information is furnished upon the condition that the person receiving it shall make his own determination for the suitability of the material for his particular purposes.