## Material Safety Data Sheet(MSDS)



1. Chemical & Company Identification				
Trade Name	Kixx Dynamic CH-4 15W/40		Product Code	L5473
Supplier	Name	GS Caltex Corp	ooration	
	Address	GS Tower, Yoksam-dong, Kangnam-gu, Seoul, 135-985, Korea		
	<b>Routine Inquiries</b>	82-2-2005-6841~5		
	Fax	82-2-565-5156		
<b>Chemical Description</b>	Lubricating Oil			

2. Hazards Identification			
Warning Statements	NO SIGNIFICANT HAZARD.		
Eyes	Expected to cause no more than minor eye irritation characterized by tearing or a burning sensation.		
Oral	If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.		
Inhalation	Breathing the vapour or mist may cause respiratory irritation, discomfort, or other pulmonary effects.		
Skin	Not expected to be irritating following short-term contact. Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material.		
Long term toxic effect	The base oil component(s) are not expected to be carcinogenic based on IARC criteria. This product has not been tested as a whole for chronic health effects. See Section 11 for additional information.		

3. Composition & Ingredients		
Components	CAS No.	Range in %
Severely Hydrotreated Heavy Paraffinic Distillate	64742-547	80-93
Additives which may include detergent-inhibitor, viscosity index improver, pour point depressant, or antifoam agent	Not Available	7-20

4. First Aid Measures		
Eyes	Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. If irritation persists, see a doctor.	
Skin	Wash skin thoroughly with soap and water. If skin irritation persists or a rash develops as a result of excessive contact, see a doctor. Launder contaminated clothing.	
Inhalation	Inhalation If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor.	
	If swallowed and person is conscious, give water or milk DO NOT make person vomit	

Ingestion	except on advice of medical personnel. If advice cannot be obtained, take person with container and label to nearest emergency treatment center. Never give anything by mouth to an unconscious person.
Advice to doctor	None Applicable.

5. Fire Fighting Measures		
Ignition temp. (Degrees C)	Not Determined	
Flammable limits (% by volume)	Not Determined	
Flash point (Degrees C)	(COC)	
Fire extinguishing agents	According to the U.S. National Fire Protection Association Guide, use water fog, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak.	
Explosion hazards	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.	

6. Accidental Release Measures		
In case of spill	Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container. Prevent contamination of groundwater or surface water.	

7. Handling & Storage			
General	Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimised. Water contamination should be avoided. Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.		

8. Exposure Control/Personal Protection			
Eyes	No special eye protection is usually necessary. Safety glasses, chemical type goggles, or face shield appropriate where splashing or misting is expected during routine operations or spill clean-up.		
Skin	Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.		
Inhalation	Respiratory protection is normally not required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standard(s), the use of an approved respirator is recommended. Wear approved respiratory protection such as a toxic dust, mist		

Ventilation	Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the process is preferred in these cases.	
Exposure limits	The ACGIH TLV for mineral oil mists is 5 mg/m <sup>3</sup> for a daily 8-hour exposure. A short term exposure limit (STEL) of 10 mg/m <sup>3</sup> is recommended.	

9. Physical & Chemical Properties			
Appearance	Clear Liquid	Odor	Mild Petrolium Odor
рН	Not Applicable	Solubility(water)	Negligible
Boiling point(deg. C)	Not Determined	Evaporation	Not Determined
Vapor pr.(mmHg)	Not Determined	Density	0.8714 kg/L @15℃
Vapor density(air=1)	Not Determined	Viscosity	14.44 cSt@100℃

10. Stability & Reactivity		
Hazardous Polymerizations	DO NOT OCCUR	
Products of combustion	Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustion products of nitrogen or sulfur.	
Conditions to avoid	Strong oxidizers such as chlorates, nitrates, peroxides, etc.	

11. Toxicological Information		
General	This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans.	

12. Ecological Information		
Environmental effects	No specific ecotoxicity data on this product are available. This material may present environmental risks common to oil spills.	

13. Disposal Considerations		
Waste disposal	Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.	
Remarks	This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs.	

14. Transport Information	
UN Number	Not Applicable

Dangerous Goods Class	Not Applicable
Proper Shipping Name	Not Applicable
Hazchem Code(Australia/NZ)	Not Applicable
Additional Information	None Determined

15. Regulatory Information		
Respirator Information	In the absence of local approved authorities, follow U.S. NIOSH/MSHA, U.K. BSI, or joint Australia-New Zealand AS/NZS 1715/1716. Respirators must follow AS/NZS 1715/1716 standard for approved respirators.	

## 16. Other Information

To the best of our knowledge, the information provided in this MSDS document is correct. Access to this information is being provided via the Internet so that it can be made available to as many potential users as possible. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.