



Material Safety Data Sheet (MSDS)

Product	Kixxol		
CAS No.	RTECS No.	UN No.	EC No.
64742-47-8	-	1268	265-149-8
List No.	Date of preparation	Date of preparation	Department of Team
AR0010	2008-07-25	2016-12-16	Safety / Health Planning Team

1. IDENTIFICATION

A. Product name

- Kixxol [AR0010]

B. Recommended use and restriction on use

- General use : Solvent
- Restriction on use : Not available

C. Manufacturer / Supplier / Distributor information

○ Manufacturer information

- Company name : GS Caltex Corporation
- Address : 508 Nonhyun-ro, Gangnam-gu, Seoul, Korea
- Emergency telephone number : 82-1544-5151

○ Supplier/Distributor information

- Company name : GS Caltex Corporation
- Address : 508 Nonhyun-ro, Gangnam-gu, Seoul, Korea
- Telephone number : 82-1544-5151
- Emergency : 82-1544-5151
- Fax Number : 02-565-5168

2. HAZARD IDENTIFICATION

A. GHS Classification

- Flammable liquids : Category3
- Aspiration hazard : Category1
- Acute aquatic toxicity : Category2
- Chronic aquatic toxicity : Category2

B. GHS label elements

○ Hazard symbols



○ Signal words

- Danger

○ Hazard statements

- H226 Flammable liquid and vapour
- H304 May be fatal if swallowed and enters airways
- H401 Toxic to aquatic organisms.
- H411 Toxic to aquatic life with long lasting effects

○ Precautionary statements

1) Prevention

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools. Flammable liquids (chapter 2.6) 1, 2, 3
- P243 Take precautionary measures against static discharge.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2) Response

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with
- P331 Do NOT induce vomiting.
- P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).
- P391 Collect spillage.

3) Storage

- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification : (NFPA Classification)

○ NFPA grade (0 ~ 4 level)

- Health : 1 , Flammability : 2, Reactivity : 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Distillates (petroleum), hydrotreated light	Deodorized kerosene ; Low odor paraffinic solvent	64742-47-8	100

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.

B. Skin contact

- Flush skin with plenty of wter for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

D. Ingestion contact

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.
- If swallowed, large amounts of water to drink and do not induce vomiting.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- Not available

C. Special protective actions for firefighters

- Keep unauthorized personnel out.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Avoid inhalation of materials or combustion by-products.
- Do not access if the tank on fire.
- Keep containers cool with water spray.
- Vapor or gas is burned at distant ignition sources can be spread quickly.
- Due to the extremely low flash point, irrigating fire extinguishing may be less effective when put out a fire.

6. ACCIDENTAL RELEASE MEASURES**A. Personal precautions, protective equipment and emergency procedures**

- Ventilate closed spaces before entering.
- Must work against the wind, let the upwind people to evacuate.
- Remove all sources of ignition.
- Handling the damaged containers or spilled material after wearing protective equipment.
- Do not direct water at spill or source of leak.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small leak: sand or other non-combustible material, please let use absorption.
- Wipe off the solvent.
- Dike for later disposal.
- Do not use plastic containers.
- Prevent the influx to waterways, sewers, basements or confined spaces.

7. HANDLING AND STORAGE**A. Precautions for safe handling**

- Wash thoroughly after handling.
- Avoid contact with incompatible materials.
- Operators should wear antistatic footwear and clothing.
- Do not inhale the steam prolonged or repeated.
- Avoid contact with heat, sparks, flame or other ignition sources.

B. Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Do not use damaged containers.
- Do not apply direct heat.
- Save applicable laws and regulations.
- Keep in the original container.
- Collected them in sealed containers.

- Store away from water and sewer.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

- ☐ **ACGIH TLV**
 - Not available
- ☐ **OSHA PEL**
 - Not available

B. Engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

C. Individual protection measures, such as personal protective equipment

- ☐ **Respiratory protection**
 - Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
 - Respiratory protection is ranked in order from minimum to maximum.
 - Consider warning properties before use.
 - Any chemical cartridge respirator with organic vapor cartridge(s).
 - Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).
 - Any air-purifying respirator with a full facepiece and an organic vapor canister.
 - For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
- ☐ **Eye protection**
 - Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
 - Provide an emergency eye wash station and quick drench shower in the immediate work area.
- ☐ **Hand protection**
 - Wear appropriate chemical resistant glove.
- ☐ **Skin protection**
 - Wear appropriate chemical resistant protective clothing.
- ☐ **Others**
 - Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid
- Color	colorless
B. Odor	petrochemical
C. Odor threshold	Not available
D. pH	5.2
E. Melting point/Freezing point	-18°C
F. Initial Boiling Point/Boiling Ranges	150 °C ~ 210 °C
G. Flash point	40.5 °C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	LEL : 0.7%, UEL 5.0%
K. Vapour pressure	5mmHg @ 38°C
L. Solubility	insoluble
M. Vapour density	4.5 (air=1)
N. Specific gravity(Relative density)	0.78~0.82
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	220°C

Q. Decomposition temperature	Not available
R. Viscosity	1.032 cSt @40°C
S. Molecular weight	Not available

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Cylinders exposed to fire may vent and release flammable gas.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces
- Avoid contact with heat, sparks, flame or other ignition sources.

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- ☐ **(Respiratory tracts)**
 - May be fatal if swallowed and enters airways
- ☐ **(Oral)**
 - Not available
- ☐ **(Eye-Skin)**
 - Not available

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- ☐ **Acute toxicity**
 - * **Oral**
 - [Distillates (petroleum), hydrotreated light] : LD50 > 15000 mg/kg Rat (IUCILID)
 - * **Dermal**
 - [Distillates (petroleum), hydrotreated light] : LD50 > 2000 mg/kg Rabbit (IUCILID)
 - * **Inhalation**
 - [Distillates (petroleum), hydrotreated light] : Mist LC50 > 5.2 mg/ℓ 4 hr Rat (IUCILID)
- ☐ **Skin corrosion/irritation**
 - Not available
- ☐ **Serious eye damage/irritation**
 - Not available
- ☐ **Respiratory sensitization**
 - Not available
- ☐ **Skin sensitization**
 - Not available
- ☐ **Carcinogenicity**
 - * **IARC**
 - Not available
 - * **OSHA**
 - Not available
 - * **ACGIH**
 - Not available
 - * **NTP**
 - Not available

*** EU CLP**

- Not available
- ☐ **Germ cell mutagenicity**
 - Not available
- ☐ **Reproductive toxicity**
 - Not available
- ☐ **STOT-single exposure**
 - Not available
- ☐ **STOT-repeated exposure**
 - Not available
- ☐ **Aspiration hazard**
 - May be fatal if swallowed and enters airways

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

- ☐ **Fish**
 - [Distillates (petroleum), hydrotreated light] : LC50 = 2.4 mg/l 96 hr Oncorhynchus mykiss (ECOTOX)
- ☐ **Crustaceans**
 - Not available
- ☐ **Algae**
 - Not available

B. Persistence and degradability

- ☐ **Persistence**
 - [Distillates (petroleum), hydrotreated light] : log Kow = 3.3 ~ 6 (Estimate)
- ☐ **Degradability**
 - Not available

C. Bioaccumulative potential

- ☐ **Bioaccumulative potential**
 - [Distillates (petroleum), hydrotreated light] : BCF = 130 ~ 159 (Jordanella floridae(Fish, fresh water), 1mg/l) (IUCLID)
- ☐ **Biodegradation**
 - [Distillates (petroleum), hydrotreated light] : Biodegradability = 4 (%) 28 day (Aerobic, Activated Sludge, Domestic wastewater, Does not decompose easily)

D. Mobility in soil

- Not available

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designated waste is mixed, it is difficult to treat separately, then can be reduction or stabilization by incineration or similar process.
- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.
- Will be pre-processed by the separation of oil and water.

B. Special precautions for disposal

- The user of this product must dispose by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG)

- 1268

B. Proper shipping name

- PETROLEUM DISTILLATES, N.O.S. OR PETROLEUM PRODUCTS, N.O.S.

C. Hazard Class

- 3

D. IMDG Packing group

- I

E. Marine pollutant

- Applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency
- Air transport(LATA): Not subject to LATA regulations.
- EmS FIRE SCHEDULE : F-E (Non-water-reactive flammable liquids)
- EmS SPILLAGE SCHEDULE : S-E (Flammable liquids, floating on water)

15. REGULATORY INFORMATION**A. National and/or international regulatory information**

- ☐ **POPs Management Law**
 - Not applicable
- ☐ **Information of EU Classification**
 - * **Classification**
 - [Distillates (petroleum), hydrotreated light] : Xn; R65
 - * **Risk Phrases**
 - [Distillates (petroleum), hydrotreated light] : R65
 - * **Safety Phrase**
 - [Distillates (petroleum), hydrotreated light] : S2, S23, S24, S62
- ☐ **U.S. Federal regulations**
 - * **OSHA PROCESS SAFETY (29CFR1910.119)**
 - Not applicable
 - * **CERCLA Section 103 (40CFR302.4)**
 - Not applicable
 - * **EPCRA Section 302 (40CFR355.30)**
 - Not applicable
 - * **EPCRA Section 304 (40CFR355.40)**
 - Not applicable
 - * **EPCRA Section 313 (40CFR372.65)**
 - Not applicable
- ☐ **Rotterdam Convention listed ingredients**
 - Not applicable
- ☐ **Stockholm Convention listed ingredients**
 - Not applicable
- ☐ **Montreal Protocol listed ingredients**
 - Not applicable

16. OTHER INFORMATION**A. Reference**

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2016-12-13

C. Revision number and Last date revised

- Not applicable

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).