Solutions, Chemistry, Service

Technical Bulletin

Kemcarb

Note! Limited annual stock product!
Consult for availability

Liquid Cold Immersion Paint and Carbon Remover

Labour Reducing Cleaning

Product Description:

KEMCARB is a mixture of neutralised acids, emulsifiers, corrosion inhibitors and chlorinated solvents. KEMCARB is used for the removal of soft and hard carbon deposits, from aircraft engine parts as well as conventional combustion engines. It is also effective as a paint remover for both air dried and baked finished paints including epoxies and acrylics.

Tank Application:

Diphase Solvent Alkaline Solution
◦ Add Kemcarb to tank – add water 15-20% of tank volume SLOWLY , allow to stand for 8-12 hours, water will form a seal over the Kemcarb
◦ ALWAYS ensure the items in the tank are BELOW the water seal. The water seal will corrode alloys quickly.
◦ Do Not agitate the Kemcarb solution – this can allow the water seal to emulsify and cause metal corrosion and solvent loss.

Maintaining The Tank:

- PreClean loose oils – use the tank to remove carbon ande paint
- Maintain the water seal to 80-100mm depth – water seal holds volatile solvents from evaporating
- Desludge the tank to maintain solution performance
- Take cross sectional sample and have Castle test and report on additives to improve performance
- Waste Kemcarb to be sent to specialized waste disposal service – provide SDS to receive cost to dispose
- Testing 2-3 times a year with a Lab report to highlight additions will extend tank life – reduce disposal cost

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Application:

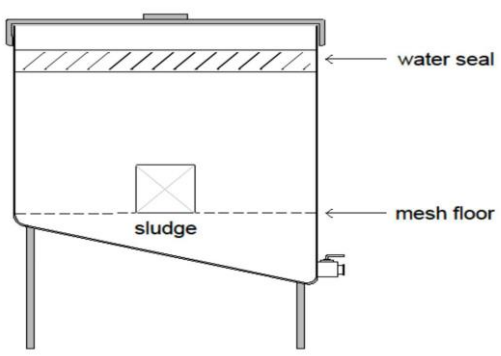
KEMCARB is used mixed with 1/4 of its volume to water. The water forms a separate layer on top and serves to prevent evaporation of the more volatile solvents.
Care should be taken to maintain the depth of this water seal at a minimum of 10 cms (4 inches). KEMCARB is used at ambient temperatures with immersion times which will vary from a 1/2 an hour to overnight soak. Components should be immersed totally in the lower layer. After soaking a thorough rinse should follow. Preferably with a pressure washer. Kemcarb conforms to the performance and corrosion requirements of MIL-C-19853C Amend. 1, Type 1 Class. KEMCARB is non corrosive to most metals including aluminium, magnesium, mild steel, cadmium and copper. It will have a descriptive effect on rubber and many plastics. Mild steel is a suitable material for tank construction. Do not use Kemcarb on materials that are susceptible to attack from chlorinated hydrocarbons.

1. Avoid contact with skin, eyes and clothing.
2. Avoid breathing, as vapours contain chlorinated solvents.
3. Use under conditions of adequate ventilation.
4. Open containers with caution.
5. No smoking - keep away from open flames.
6. In case of skin contact or spillage drown the skin with water.
7. In case of eye contact wash immediately with water and obtain medical advice.
8. Wear protective clothing including clothes and eye shields.

If the components are particularly oily or greasy a prior degreasing is desirable in order to preserve the life of KEMCARB. After immersion the parts should be thoroughly rinsed with water and the inhibitor applied. 20 litre and 205 litre.

APPEARANCE: Dark brown mobile liquid
DENSITY: 1.18 g/ml at 20oC
pH 12.0 - 12.5
FLASHPOINT: Non flammable

Cold immersion pain and carbon removal.
Kemcarb Tank – Cross Section



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Sampling Tool

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Quality for every Cleaning Situation

SERVICE ANALYSIS
KEMCARB

DATE:	20/6/17	
SAMPLE FROM:	Extreme Velocity Engineering	
DATE SAMPLED:	N/A	
WATER SEAL:	17.0mL	(from 100ml sample)
pH. OF WATER SEAL:	11.0	

20 mL SAMPLE (DISTILLATION)

METHYLENE CHLORIDE:	10mL	66.0%
EMULSIFIED WATER:	0.8mL	4.0%
CRESOLS:	4.5mL	23.4%
RESIDUE:	3.74g	16.3%

OBSERVATIONS:

1. The water seal is at the recommended level – between 15 and 25mL at 17.0mL.
2. The pH of the water seal is in specification.
3. The level of methylene chloride of 66%, is just inside the acceptable range of 65-70%
4. The amount of emulsified water is 4.0%. This is above the recommended level of between 0.5-3%.
5. The level of Cresols is slightly low at 23.4%. This is below the 25-40% specification.
6. The amount of residue is 16.3%. This is well within the recommended range of 8-30%.

RECOMMENDATIONS:

1. The water seal is satisfactory, maintaining this level will prevent further evaporation of product.
2. Tank performance should be satisfactory; however, it would be beginning to downturn in performance.
3. Topping up with fresh Kemcarb would see an increased performance and added longevity. A de-sludge of the tank is not necessary at this time.

M. McDonald
Lab Technician
17/06/16

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Form Number: Lab 003

CASTLE CHEMICALS PTY LTD
REQUEST FOR CHEMICAL CLEANING TANK ANALYSIS

BRANCH: .....
NAME OF CLIENT: .....
ADDRESS: .....
CONTACT: ..... PRODUCT: .....
DATE OF SAMPLING: .....
HOW FORWARDED: .....

TANK DATA

DIMENSIONS OF TANK: Length ..... Width ..... Depth .....
NORMAL WORKING DEPTH OF SOLVENT LAYER: .....
TOTAL DEPTH OF LIQUID WHEN SAMPLED: ..... inches
DEPTH OF WATER SEAL: ..... inches
*BATH NEW ON/REFILLED (DATE): .....
*BATH DESLUDGED: .....
*ADDITIONS MADE SINCE LAST REPORT/NEW: .....

DATE	WATER	TRANSPORT	ADJUSTMENT

PERFORMANCE DATA

NATURE OF WORK: .....
TYPE OF PRECLEANING USED, IF ANY: .....
WHAT IS A UNIT? .....
AVERAGE UNITS PER DAY/WEEK: .....
IS THE TANK WELL MAINTAINED?: .....
CLIENT'S REMARKS ON PERFORMANCE: .....

SHELF LIFE: As a quality assured manufacturer, Castle Chemicals has a stringent Quality assurance programme. As part of this regime, the label on this product shows a batch number and date of manufacture. This product has a shelf life of 24 months from the label printed date of manufacture. This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Castle Chemicals assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of material.

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