

CARGO INFORMATION SCHEME

Chemical name	spent caustic	Last update	1999-06-03
Common names	brukt lut	UN number	
Chemical formular		MFAG number	705
Chemical family	caustic	MARPOL Annex	II
Colour	pale yellow due to hydrocarbon content	Annex II pollution cat.	D
Odour	benzene like, aromatic	IMO Ships type	3
Own reaction	stable	Density @ 15°C	1.04
Reaction with water	none	Correction factor/°C	0.0007
Reaction other	reacts with metals like copper, alu, carbon steel	Petroleum tables used	
Solubility with water	part of the cargo are solutable	Melting point °C	-10
Compatibility number		Boiling point °C	101
Separate from No. (USCG)		Flash point °C	variable
Type of toxic test tubes		Auto-ignition point °C	
Toxicity in case of fire		Viscosity	
Fire extinguishing agent		Odour limit ppm	
Special fire procedure		Explos. limits Vol %	
Spill or leak procedure	Absorb with granulate and collect in container	Vapour press kPa/20	
	Flush with plenty of water	Vapour dens.rel to air	

SAFETY AND FIRST AID INFORMATION

Main hazard	corrosive liquid with dangerous fumes	Health risk	Moderate
Symptoms if exposed	skin burns if exposed to liquid. long term affect to fumes as they contain benzene	TLV ppm	
Personal protection aid		Is it a cancer agent	yes
		Is antidote available	no

First aid

Eye contact	wash with plenty of water for 15 min and seek medical advice
Skin contact	wash with plenty of water as long time as possible and seek medical advise
Inhalation	seek fresh air. if victim is unconscious start artificial respiration
Ingestion	do not induce vomitting. Drink plenty of water and seek medical attention immediately

CARGO HANDLING

Coating requirements	stainless steel	Voyage temp. °C	ambient
Wall wash tests	no	Discharge temp. °C	ambient
Previous cargo(es)	no	Preheating of tanks	no
Fresh water flush	yes	Cirkulation on voyage	yes
Demiwater flush	no	Inhibitor certificate	no
Condition prior to loading	clean	Sweeping after disch.	no
Remarks		Heat adjacent	no

Remarks	Rafnes accepts wet tanks before loading	yes
TANKCLEANING - after discharge		
Prewash (not marpol)	1 hour cold fw	
Ordinary bw wash	Recirculation wash 30 min with cold fw	
Recirculation	1-3 hours with Watensol solution	
Steaming		
Removal of rob	Brush and Careclean degreaser	
Hand hosing/high press		
Chemicals for washing	Careclean degreaser	
SPECIAL INSTRUCTIONS		
<p>Recirculation of the cargo must be started asap after loading of tanks and continued for as long as possible. During discharging never allow tanks to dry out. When a tank is empty wash 10 min with cold fw and discharge water to shore. Before discharging agree with shore quantity of water to be used for washing during the discharge due to space in shoretanks i.g. If possible do not stow cargo adjacent to each other. Keep separated by an empty tank.</p> <p>After completion of discharge ing commence t/c asap. Keep tanks wet. If tanks are allowed to dry out a layer of phosphor-like powder is likely to show up on the tank walls. This layer can be very difficult to remove. May require a lot of manpower and coal tar cleaner. Spent caustic is usually shipped as non flammable with a flash point < 61 °C</p>		