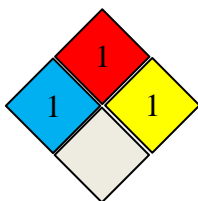




SECTION 1		IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
Product name	Heavy Alkylbenzene, HAB	
Synonyms	Specialty Alkylate Bottoms	
Product Use	As a chemical intermediate in textile industry products, refrigerating oils, thermal fluids, electrical oils, plasticizers, greases, mining, oilfield drilling, etc.	
Company	Iran Chemical Industries Investment Co. (ICIIC)	
Address	Western side of Montazeri Power Plant, Azadegan Highway (15 km northward), Esfahan, Iran. Tel.: +983133808350-7	
Emergency telephone number	+983133942428	
E-mail address	info@iciiclab.com	

SECTION 2		HAZARDS IDENTIFICATION
-----------	--	------------------------



GHS Hazards

Aspiration hazard

Category 1

Hazard statements	H304 May be fatal if swallowed and enters airways.		
Precautionary statements			
Response	P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 do not induce vomiting.		
Storage	P405 Store locked up.		
Disposal	P501 Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.		

SECTION 3		COMPOSITION/INFORMATION ON INGREDIENTS
-----------	--	--

<u>Components</u>	<u>EC No.</u>	<u>CAS-No.</u>	<u>Weight percent</u>
Benzene, mono-C10-13-alkyl derivs, distn. residues	284-660-7	84961-70-6	N/A

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

**SECTION 4 FIRST AID MEASURES**

Eye contact	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.
Ingestion	If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIREFIGHTING MEASURES**FLAMMABLE PROPERTIES**

Fire/explosion	Spontaneous combustion can occur should the product come into contact with hot fiber glass or mineral fiber insulations (e.g. in case of leakages), especially when exposed to atmospheric oxygen (e.g. removal of insulation panels). NFPA Class IIIB combustible liquid.
Suitable extinguishing media	Water spray or fog, foam, dry chemical, CO ₂
Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus for fire fighting if necessary.
Further information	Keep containers and surroundings cool with water spray. Do not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up	Ventilate the area. 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 (see section 13). Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
--	---

SECTION 7 HANDLING AND STORAGE

Safe handling advice	Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from sources of ignition - No smoking. Keep container tightly closed. The use of foam glass as an insulating material can reduce the risk of such spontaneous combustion. Insulation material soaked with the product must be replaced with new insulation material as soon as possible.
Storage/Transport pressure	Ambient
Load/Unload temperature	Ambient


SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES	Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines). Provide adequate ventilation. Use explosion-proof electrical/ ventilating/ lighting/ equipment.
PERSONAL PROTECTIVE EQUIPMENT	
Eyes	Safety glasses with side-shields
Skin	Wear suitable protective clothing, gloves and eye/face protection.
Inhalation	Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.
EXPOSURE GUIDELINES	Contains no substances with occupational exposure limit values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid;
Colour	Pale yellow
Form	liquid
Odour	Hydrocarbons
Odour Threshold	no data available
Flash point	170-200 °C (338-392 °F);
Flammability	Upper explosion limit: no data available Lower explosion limit: no data available
Boiling point/boiling range	320-550 °C (608-1022 °F);
Auto-ignition temperature	300 °C (572 °F);
Decomposition temperature	no data available;
Average Molecular Weight	340-350 g/mol;
Density	<0.895 g/cm ³ @ 20 °C (68 °F);
Water solubility	Insoluble
Viscosity	23.1 c.St @ 37.8 °C (100.04 °F);
pH	no data available
Evaporation rate	no data available
Partition coefficient: n-octanol/water	no data available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Stable at normal ambient temperature and pressure.
Chemical stability	No decomposition if stored and applied as directed.



Conditions to avoid	Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation. Extremes of temperature and direct sunlight.
Hazardous decomposition products	No decomposition if stored normally. Stable under normal conditions. Use at elevated temperatures can lead to thermal decomposition and the formation of low-boiling and high-boiling secondary products (e.g. hydrocarbons). During removal of low-boiling decomposition products from the system, appropriate risk management measures for flammable liquids must be applied.
Materials to avoid	Strong oxidizing agents
Hazardous polymerisation	None.

SECTION 11**TOXICOLOGICAL INFORMATION**

Acute dermal toxicity	LD50 rabbit: > 2,000 mg/kg
Acute inhalation toxicity	no data available
Acute oral toxicity	LD50 rat: > 5,000 mg/kg
Skin corrosion/irritation	Primary irritation (rabbit): 0.8 (Max. score is 8.0.)
Eye damage/irritation	Primary irritation (rabbit): 3.7 (Max. score is 110.)
Respiratory or skin sensitization	no data available
Germ cell mutagenicity	Genotoxicity in vitro: no data available Genotoxicity in vivo: no data available Assessment Mutagenicity: no data available
Reproductive toxicity	Reproductive toxicity: no data available Assessment Reproductive toxicity: no data available Teratogenicity: no data available Assessment teratogenicity: no data available
STOT - single exposure	no data available
STOT - repeated exposure	no data available
Aspiration toxicity	no data available
Carcinogenicity	Assessment carcinogenicity: Contains no ingredient listed as a carcinogen

**SECTION 12 ECOLOGICAL INFORMATION**

Aquatic toxicity	Aquatic toxicity is unlikely due to low solubility.
Toxicity to fish	Aquatic toxicity is unlikely due to low solubility., Expected to be found on solid surfaces such as sediments, soils and biosludges and not in the water., (Based on analogy with similar products).
Toxicity to aquatic invertebrates	no data available
Toxicity to algae	no data available
Chronic toxicity to fish	no data available
Chronic toxicity to aquatic invertebrates	no data available
Biodegradation	Biodegradable, but at slow rates. Due to its low solubility in water, large amounts can be eliminated by separators for oil or fat.
Bioaccumulation	no data available
Mobility in soil	no data available
Other adverse effects	no data available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code	Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.
Disposal methods	Dispose of only in accordance with local, state, and federal regulations.
Empty containers.	Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT	Not regulated.
IATA	Not regulated.
IMDG	Not regulated.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks	No data available
ISIC Number	24113540



SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA Hazards (HCS 1994)
Non-hazardous substance

TSCA Inventory Listing**Components**

Benzene, mono- C10-13-alkyl derivs., distn. Residues

CAS-No.

84961-70-6

SARA 302 Status**Components****CAS-No.****Weight percent**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Classification

Non-hazardous substance

SARA 313 Chemical**Components****CAS-No.****Weight percent**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US. EPA CERCLA Hazardous Substances (40 CFR 302)**Components****Reportable Quantity****Weight percent**

none

INTERNATIONAL REGULATIONS**WHMIS Classification**

WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.

European Union

The product does not need to be labelled in accordance with EC directives or respective national laws.

Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. Industrial Safety & Health Law (ISHL) Inventory	Not listed
Canada. Domestic Substances List (DSL) Inventory	Not listed
Canadian Non-Domestic Substance Listing (NDSL)	Listed
European Inventory of Existing Commercial Chemical Substances (EINECS) Listing	Listed
Philippines. Inventory of Chemicals / Chemical Substances (PICCS)	Not listed
Korea. Existing Chemicals Inventory (KECI)	Not listed
China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Not listed



New Zealand. Inventory of Chemicals (NZIoC)	Not listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

STATE REGULATIONS

California Prop. 65

Components

none

CAS-No.**SECTION 16 OTHER INFORMATION****HAZARD RATINGS**

NFPA	<u>Physical Hazard/</u>		
	<u>Health</u>	<u>Flammability</u>	<u>Instability</u>
	1	1	1

Abbreviations and Acronyms:

- CAS:** Chemical Abstracts Service (division of the American Chemical Society)
- CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act
- CFR:** Code of Federal Regulations
- CPR:** Controlled Products Regulation
- DOT:** Department Of Transportation
- HMIS:** Hazardous Materials Identification System
- IATA:** International Air Transport Association
- IBC:** International Boundary Commission
- IMDG:** International Maritime Code for Dangerous Goods
- LD50:** Lethal dose, 50 percent
- MARPOL:** Maritime Pollution
- NFPA:** National Fire Protection Association
- OSHA:** Occupational Safety & Health Administration
- PEL:** Permissible Exposure Limit
- SARA:** SuperFund Amendments & Reauthorization Act
- STOT:** Specific Target Organ Toxicity.
- TLV:** Threshold Limiting Value
- TSCA:** United States Toxic Substances Control Act Inventory
- US. EPA:** United States Environmental Protection Agency



WHMIS: Workplace Hazardous Materials Information System

DISCLAIMER: THE DATA AND INFORMATION CONTAINED HEREIN ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH CUSTOMER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE MATERIALS AND PROCEDURES FOR ICIIC (IRAN) PRODUCTS. ALTHOUGH BASED ON INFORMATION SOURCES WHICH ICIIC (IRAN) CONSIDERS ACCURATE AND RELIABLE, ICIIC (IRAN) MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.