SAFETY DATA SHEET

Residual Marine Fuel (RMA, RMB, RMD, RME, RMF & RMG)

Section 1. Identification

GHS product identifier Residual Marine Fuel (RMA, RMB, RMD, RME, RMF & RMG)

Other means of identification RMA 10, RMA 10LS, RMA 10XX, RMA 10LSXX, RMA 30, RMA 30LS, RMA 30XX, RMA 30LSXX
RMB 30, RMB 30LS, RMB 30XX, RMB 30LSXX
RMD 80, RMD 80LS, RMD 80XX, RMD 80LSXX
RME 180, RME 180LS, RME 180XX, RME 180LSXX
RMF 180, RMF 180LS, RMF 180XX, RMF 180LSXX
RMG 180, RMG 180LS, RMG 180XX, RMG 180LSXX

Product type Liquid.

Product code SMI2112.

SDS # SMI2112.

Relevant identified uses of the substance or mixture and uses advised against

Product use Fuel for industrial, marine and commercial boilers and furnaces; fuel for low and medium speed diesel engines.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

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1 Harbour Front Avenue
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EMERGENCY TELEPHONE NUMBER +65 63718999 (24 hours)

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Section 2. Hazards identification

Classification of the substance or mixture
ACUTE TOXICITY: INHALATION - Category 4
SKIN CORROSION/IRRITATION - Category 2
CARCINOGENICITY - Category 1B
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (ACUTE) - Category 1
AQUATIC TOXICITY (CHRONIC) - Category 1

GHS label elements

Hazard pictograms

Signal word Danger

Section 2. Hazards identification

Hazard statements

Harmful if inhaled.
Causes skin irritation.
May cause cancer.
Suspected of damaging the unborn child.
May be fatal if swallowed and enters airways.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

Obtain special instructions before use.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use personal protective equipment as required.
Avoid release to the environment.

Response

IF exposed or concerned: Get medical attention/advice.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Not applicable

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification

Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.
See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.
Will cause burns if hot material contacts eyes.
Will cause burns if hot material contacts skin.
This material can contain hydrogen sulfide (H_2S), a very toxic and extremely flammable gas.
This material may contain significant quantities of polycyclic aromatic hydrocarbons (PCAs), some of which have been shown by experimental studies to induce skin cancer.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Ingredient name	%	CAS number
Fuel oil, residual	40 - 100	68476-33-5
Fuels, diesel	0 - 60	68334-30-5
Sulphur or Sulfur	1 - 5	7704-34-9
Naphthalene	1 - 5	91-20-3
Ethylbenzene	0.1 - 1	100-41-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Cold product - Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
Hot product - Flood with water to dissipate heat. In the event of any product remaining, do not try to remove it other than by continued irrigation with water. Obtain medical attention immediately.

Inhalation

If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

EXPOSURE TO HYDROGEN SULFIDE:
Casualties suffering ill effects as a result of exposure to hydrogen sulfide should be immediately removed to fresh air and medical assistance obtained without delay. Unconscious casualties must be placed in the recovery position. Monitor breathing and pulse rate and if breathing has failed, or is deemed inadequate, respiration must be assisted, preferably by the mouth to mouth method. Administer external cardiac massage if necessary. Seek medical attention immediately.

Skin contact

Cold Product - Wash contaminated skin with soap and water. Remove contaminated clothing and wash underlying skin as soon as reasonably practicable.
Hot Product - Flood skin with cold water to dissipate heat, cover with clean cotton or gauze, obtain medical advice immediately.
Never use gasoline, kerosene or other solvents to remove product from skin or clothing.

Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias. Inhalation of hydrogen sulfide may cause central respiratory depression leading to coma and death. It is irritant to the respiratory tract causing chemical pneumonitis and pulmonary edema. The onset of pulmonary edema may be delayed for 24 to 48 hours. Treat with oxygen and ventilate as appropriate. Administer broncho-dilators if indicated and consider administration of corticosteroids. Keep casualty under surveillance for 48 hours in case pulmonary edema develops.
Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.
Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Specific treatments

No specific treatment.

Section 4. First aid measures

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Avoid spraying directly into storage containers because of the danger of boil-over. Boil-over is the rapid increase in volume caused by the presence of water in hot product and the subsequent overflow from a tank. Vapors can form explosive mixtures with air. Vapors are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
This substance will float and can be reignited on surface water.

Hazardous thermal decomposition products

Combustion products may include the following:
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)
sulfur oxides (SO_2, SO_3 etc.)
Hydrogen Sulfide (H2S)
other hazardous substances.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows. No action shall be taken involving any personal risk or without suitable training. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. This material can contain hydrogen sulfide (H_2S), a very toxic and extremely flammable gas.

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained positive pressure breathing apparatus (SCBA).

This material can contain hydrogen sulfide (H_2S), a very toxic and extremely flammable gas. Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory

Section 6. Accidental release measures

protective equipment and a safe system of work. Wear self-contained positive pressure breathing apparatus (SCBA).

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Depending upon its temperature the product may be liquid, semi-solid or solid. Protect drains from spills and prevent entry of product, since this may result in blockage on cooling. Should blockage occur, notify the appropriate authority immediately.

Spillages in water or at sea:
Product less dense than water: In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, before working in the combustion/exhaust spaces of engines/boilers or before handling ash/dust produced by the combustion of product, the work area should be thoroughly dampened with water. This will help to minimize the amount of airborne contamination produced by the work activity. However, because of the risk of explosion, do not allow water to come into contact with hot ash/dust. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.
Product which is denser than water will sink to the bottom, and usually no intervention will be feasible. If possible, collect the product and contaminated materials with mechanical means, and store/dispose of according to relevant regulations. In special situations (to be assessed on case-by-case basis, according to expert judgment and local conditions), excavations of trenches on the bottom to collect the product with sand may be a feasible option.

Methods and materials for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. Depending upon its temperature the product may be liquid, semi-solid or solid. Protect drains from spills and prevent entry of product, since this may result in blockage on cooling. Should blockage occur, notify the appropriate authority immediately. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain

Section 7. Handling and storage

product residue and can be hazardous. Do not reuse container. Avoid contact of spilled material and runoff with soil and surface waterways. Contact with hot product may cause burns. Aspiration hazard Can enter lungs and cause damage. Never siphon by mouth. Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

This material can contain hydrogen sulfide (H_2S), a very toxic and extremely flammable gas. Vapors containing hydrogen sulfide may accumulate during storage or transport and may also be vented during filling of tanks. Hydrogen sulfide has a typical "bad egg" smell but at high concentrations the sense of smell is rapidly lost, therefore do not rely on sense of smell for detecting hydrogen sulfide. Use specially designed measuring instruments for determining its concentration.

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry to any tanks or other confined space requires a full risk assessment and appropriate control measures to be put in place in conformance with appropriate regulations and industry practice on confined space entry. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapor mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurized fuel pipes, the vapor or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuel oil, residual	**ACGIH TLV (United States).** TWA: 0.2 mg/m³, (Benzene-soluble)
Fuels, diesel	**ACGIH TLV (United States). Absorbed through skin.** TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hour(s). Issued/Revised: 1/2007 Form: Total hydrocarbons
Naphthalene	**Factories Order (PEL) (Singapore).** PEL (long term): 10 ppm 8 hour(s). Issued/Revised: 1/1997 PEL (long term): 52 mg/m³ 8 hour(s). Issued/Revised: 1/1997 PEL (short term): 79 mg/m³ 15 minute(s). Issued/Revised: 1/1997 PEL (short term): 15 ppm 15 minute(s). Issued/Revised: 1/1997
Ethylbenzene	**Factories Order (PEL) (Singapore).** PEL (long term): 100 ppm 8 hour(s). Issued/Revised: 1/1997 PEL (long term): 434 mg/m³ 8 hour(s). Issued/Revised: 1/1997

PEL (short term): 543 mg/m³ 15 minute(s). Issued/Revised: 1/1997

PEL (short term): 125 ppm 15 minute(s). Issued/Revised: 1/1997

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Recommended: Chemical splash goggles.

Skin protection

Hand protection

Cold material: Wear chemical resistant gloves. Recommended: nitrile gloves.
Hot material: to prevent thermal burns wear heat resistant and impervious gauntlets/gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Skin protection

Cold material: Wear suitable protective clothing. Footwear highly resistant to chemicals. When there is a risk of ignition wear inherently fire resistant protective clothes and gloves. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination. When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required. Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.

Section 8. Exposure controls/personal protection

Respiratory protection

Use with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Suitable breathing apparatus (independent of ambient atmosphere) must be worn where there is a risk of hydrogen sulfide exposure limits being exceeded.
If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application.
Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Recommended: Combined filter suitable for gases, vapors and particles (dust, smoke, mist, aerosol). Filter type: AP.

Thermal hazards

Hot material: Wear suitable protective clothing to protect against heat and brief contact with flame. Protection should be provided for exposed areas of the neck and head.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Dark Brown. / Black.
Odor	Oily
Odor threshold	Not available.
pH	Not available.
Melting point	Not available.
Boiling point	150 to 750°C (302 to 1382°F)
Flash point	Closed cup: >=60°C (>=140°F) [Pensky-Martens.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Physical state - Liquid.
Lower and upper explosive (flammable) limits	Lower: 0.5% Upper: 5%
Vapor pressure	<0.133 kPa (<1 mm Hg) at 20°C
Vapor density	>0.9 [Air = 1]
Relative density	Not available.
Density	975 kg/m^3 (0.975 g/cm^3) at 15°C
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	>250°C (>482°F)
Decomposition temperature	Not available.
Viscosity	Kinematic: 10 to 180 mm^2/s (10 to 180 cSt) at 50°C

Section 10. Stability and reactivity

Reactivity
No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Chemical stability
The product is stable.

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid
Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.

Incompatible materials
Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Ethylbenzene	Category 2 Category 3	Not determined Not determined	central nervous system (CNS) Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Fuels, diesel	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Fuels, diesel Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure
Routes of entry anticipated:Dermal, Inhalation.
Routes of entry not anticipated:Oral.

Potential acute health effects

Eye contact
Causes serious eye irritation. Will cause burns if hot material contacts eyes.

Inhalation
Harmful if inhaled.

Skin contact
Causes skin irritation. Will cause burns if hot material contacts skin.

Ingestion
Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
Adverse symptoms may include the following:
pain or irritation
watering
redness

Section 11. Toxicological information

Inhalation

Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact

Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion

Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact

Not applicable.

Potential chronic health effects

General

As with all such products containing potentially harmful levels of PCAs, prolonged or repeated skin contact may eventually result in dermatitis or more serious irreversible skin disorders including cancer. May cause damage to organs through prolonged or repeated exposure. Vapor, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer.

Carcinogenicity

May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

Suspected of damaging the unborn child.

Developmental effects

No known significant effects or critical hazards.

Fertility effects

No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Environmental effects

Very toxic to aquatic life with long lasting effects.

Persistence/degradability

IOPC Persistent / not persistent. oil: Persistent

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not available.	-	-	-

Bioaccumulative potential

Not available.

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC}) Not available.

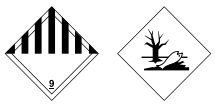
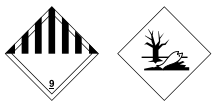
Mobility Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Other ecological information This product has a density close to that of water. Spills are unlikely to form a distinct film on the water surface, and may become dispersed as globules if mixed or agitated. If released to water the product may sink.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	IMDG	IATA
UN number	UN 3082	UN 3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Heavy fuel oil). Marine pollutant	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Heavy fuel oil)
Transport hazard class(es)	9 	9 
Packing group	III	III
Environmental hazards	Yes.	Yes.
Special precautions for user	Not available.	Not available.
Additional information	**Emergency schedules (EmS)** F-A, S-F	-

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product	No known specific national and/or regional regulations applicable to this product (including its ingredients).

Regulation according to other foreign laws

REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	Not determined.
Philippines inventory (PICCS)	Not determined.

Section 16. Other information

History

Date of issue/Date of revision	2011 June 27
Date of previous issue	No previous validation
Version	1
Prepared by	Product Stewardship
Key to abbreviations	ACGIH = American Conference of Industrial Hygienists CAS Number = Chemical Abstracts Service Registry Number GHS = Global Harmonized System IATA = International Air Transport Association, the organization IMDG = International Maritime Organization Rules, rules governing shipment of goods by water. OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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