

Material Safety Data Sheet

Identification of the substance/preparation and company/undertaking

Material Name : Dr. SEAL Bitumen Primer
 Uses : Bituminous Paint

Manufacturer/Supplier : Rich Innovation Marketing Inc.
 826 Zacateros St. Sta. Cruz, Manila

Telephone : (02) 7333007 / (02) 7337783
 Fax : (02) 7364589

Composition/information on ingredients

Preparation description : A blend of components derived from crude Petroleum oil, solvent and additives.

Hazardous Components

Chemical Identity	CAS	EINECS	Symbol(s)	R-phrases(s)	Conc.
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Kerosene	8008-20-6	232-366-4	Xi, Xn, N	R10; R38; R65; R51/53	40.00 - 60.00 %
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Additional Information : Crude petroleum oil may contain trace levels of Hydrogensulphide (H₂S).
 Refer to chapter 16 for full text of EC R-phrases.

Hazards identification

EC Classification : Flammable.
 Irritant.

Dangerous for the environment.

Health Hazards : Hydrogen sulphide (H₂S), an extremely flammable and toxic gas, and other hazardous vapours may evolve and collect in the headspace of storage tanks, transport vessels and other enclosed containers. Hydrogen sulphide is highly toxic and may be fatal if inhaled. May dull the sense of smell, so do not rely on odour as an indication of hazard. Irritating to skin.

Signs and Symptoms : Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.

Safety Hazards : Flammable. In use, may form flammable/explosive vapour-air mixture.

Environmental Hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

FIRST AID MEASURES

Inhalation : If inhalation of mists, fumes or vapour causes irritation to the nose or throat, remove to fresh air. If rapid recovery does not occur, obtain medical attention. Casualties suffering ill effects as a result of exposure to hydrogen sulphide should be removed to fresh air. Do not attempt to rescue the victim unless proper respiratory protection is worn. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting, or unresponsive, give 100% oxygen with rescue breathing or Cardiopulmonary Resuscitation (CPR) as required and transport to the nearest medical facility.

Skin Contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Eye Contact : Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion : In the unlikely event of ingestion, obtain medical attention immediately. Do not induce vomiting.

Advice to Physician : Treat symptomatically. Call a doctor or poison control center for guidance.

FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards : Flammable vapours may be present even at temperatures below the flash point. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water. Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Boil-over of tanks and violent eruptions may occur in the presence of water.

Suitable Extinguishing Media	: Foam, water spray or fog. Dry chemical powder, carbondioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	: Do not use water in a jet.
Protective Equipment for Firefighters	: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

Additional Advice : Keep storage tanks, pipelines, fire exposed surfaces cool with water delivered as a fine spray.

ACCIDENTAL RELEASE MEASURES

Evacuate the area of all non-essential personnel. Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal.

Protective measures : Avoid contact with skin, eyes and clothing. Do not breathe fumes, vapour. Remove all possible sources of ignition in the surrounding area. Ventilate contaminated area thoroughly. Use spaces. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean Up Methods : Small spillage
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. Use clean non-sparking tools to collect the material and place into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.
Large spillage:
Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Treat residues as for small spillage.

Additional Advice : Local authorities should be advised if significant spillage cannot be contained.

HANDLING AND STORAGE

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Tel: 733-3007/733-1183 Fax: 736-4589

E-mail: nccreus_richinnovation@yahoo.com richinnovation@globe.ap.blackberry.net

General Precautions : Extinguish any naked flames. Do not smoke.

Remove ignition sources. Avoid sparks. Take precautionary measures against static discharges.

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.

Handling : Avoid contact with skin, eyes, and clothing. Avoid inhaling vapour and/or mists. Use only in well-ventilated areas.

for quality, health and safety reasons do not exceed therecommended storage and handling temperature.Refer tothe Technical Data Sheet for correct storage and handling temperatures.

Storage : Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep tanks covered and containers tightly closed when not in use.Bulk storage tanks should be diked (bunded). Do not smoke in storage areas.

Storage Temperature : 0°C minimum. 30 °C / 86 °F maximum.

Recommended Materials : For containers or container linings, use stainless steel.

Unsuitable Materials : For containers or container linings avoid PVC, Polyethyleneor high density polyethylene.

EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

Material	Source	Type	ppm	mg/m3	Notation
Hydrogen Sulphide	ACGIH	TWA	10 ppm		
	ACGIH	STEL	15 ppm		
	PH OEL	TWA 15	10 ppm	15 mg/m3	
	PH OEL	TWA	10 ppm	15 mg/m3	
Kerosine	ACGIH	TWA [Nonaerosol.]		200 mg/m3	P: Application restricted to conditions in which there are negligible aerosol exposures. as total hydrocarbon vapor
	ACGIH	SKIN_DES			Can be absorbed

		[Nonaerosol.]			through the skin. as total hydrocarbon vapor
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Material

Kerosine

Source

ACGIH

Hazard Designation

 Confirmed animal carcinogen
with unknown relevance to
humans.

Exposure Controls

The level of personal protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Use sealed systems as far as possible. Use intrinsically safe, exhaust ventilation if there is a risk of inhalation of vapours, mists or aerosols. Eye washes and showers for emergency use. Wash hands before eating, drinking, smoking and using the toilet. Contaminated clothing must be removed as soon as possible. It must be laundered before reuse.

Personal Protective Equipment

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection

In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Hand Protection

PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.

Eye Protection

Wear safety glasses or full face shield if splashes are likely to occur.

Protective Clothing

PVC apron and sleeves, or full PVC covering. Safety boots - rubber, knee length.

Environmental Exposure

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Brown to black. liquid
Odour	: Characteristic.
pH	: Not applicable.
Initial Boiling Point and Boiling Range	: Data not available
Softening point	: Not applicable.
Flash point	: Typical 23 - 55 °C / 73 - 131 °F (Pensky-Martens Closed Cup)
Upper / lower Flammability or Explosion limits	: Data not available
Vapour pressure	: Data not available
Specific gravity	: Data not available
Density	: ca. 900 - 1,100 kg/m ³ at 25 °C / 77 °F
Water solubility	: Insoluble.
Solubility in other solvents	: Soluble.
n-octanol/water partition coefficient (log Pow)	: Data not available
Kinematic viscosity	: 315 - 360 mm ² /s at 25 °C / 77 °F
Vapour density (air=1)	: Data not available
Evaporation rate (nBuAc=1)	: Data not available
Hygroscopicity	: Negligible.
Decomposition	: Data not available
Temperature	

STABILITY AND REACTIVITY

Stability	: Stable under normal conditions of use.
Conditions to Avoid	: Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid	: Reacts with strong oxidising agents. Avoid contamination of thermal insulation near hot surfaces by oil and bitumen and replace lagging where necessary, with a non-absorbent type of insulation.
Hazardous	: Hydrogen sulphide.
Decomposition Products	

TOXICOLOGICAL INFORMATION

Basis for Assessment	: Toxicological data have not been determined specifically for this product. Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat
Acute Dermal Toxicity	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit

Acute Inhalation Toxicity	: Not considered to be an inhalation hazard under normal conditions of use.
Skin Irritation	: Irritating to skin.
Eye Irritation	: Expected to be slightly irritating.
Respiratory Irritation	: Inhalation of vapours or mists may cause irritation to the respiratory system.
Sensitisation	: Not expected to be a skin sensitiser.
Repeated Dose Toxicity	: Not expected to be a hazard.
Mutagenicity	: Not considered a mutagenic hazard.
Carcinogenicity	: Bitumens are not classified as dangerous under EC criteria. Bitumens contain low concentrations of Polycyclic Aromatic Compounds (PACs). In undiluted bitumens these PACs are not considered to be bio-available. However, if bitumens are mixed with diluents to obtain a low viscosity at ambient temperatures, it is believed that such materials may become bio-available. Despite the known presence of PACs, experimental work has shown that the cutback bitumens we supply are unlikely to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity	: Data not available

ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be toxic: LL/EL/IL50 1-10 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).
Mobility	: This product will form a film on the surface of water and spread. The solvent will evaporate and the bitumen will adsorb to the sediment. In contact with soil, it can penetrate the upper layers and/or affect nearby watercourses before hardening. In time the solvent will evaporate.
Persistence/degradability	: Expected to be not inherently biodegradable.
Bioaccumulation	: Contains components with the potential to bioaccumulate.
Other Adverse Effects	: Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

DISPOSAL CONSIDERATIONS

Material Disposal	: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal
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	methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

TRANSPORT INFORMATION
Land (as per ADR classification): Regulated

Class	: 3
Packing group	: III
Hazard identification no.	: 33
UN No.	: 1993
Danger label (primary risk)	: 3
Proper shipping name	: FLAMMABLE LIQUID, N.O.S. (Turpentine substitute)

IMDG

Identification number	UN 1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	(Turpentine substitute)
Class / Division	: 3
Packing group	: III
Marine pollutant	: No

IATA (Country variations may apply)

UN No.	: 1993
Proper shipping name	: Flammable liquid, n.o.s.
Technical name	: (Turpentine substitute)
Class / Division	: 3
Packing group	: III

REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification	: Flammable. Irritant. Dangerous for the environment.
EC Symbols	: Xi Irritant. N Dangerous for the environment.
EC Risk Phrases	: R10 Flammable. R38 Irritating to skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects

EC Safety Phrases	in the aquatic environment.
	: S16 Keep away from sources of ignition - No smoking.
	S23 Do not breathe fumes, vapour or spray.
	S51 Use only in well-ventilated areas.
	S29 Do not empty into drains.
PICCS (PH)	S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
	: All components listed.

OTHER INFORMATION

R-phrase(s)	
R10	Flammable.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: May cause lung damage if swallowed.
MSDS Version Number	: 1.3
MSDS Effective Date	: 29.06.2009
MSDS Revisions	: A vertical bar () in the left margin indicates an amendment from the previous version.
Uses and Restrictions	: This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.
MSDS Distribution	: The information in this document should be made available to all who may handle the product.

Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.