

Section 1 - Identification of The Material and Supplier

Mercury Marine
41-71 Bessemer Drive
Dandenong South, Victoria 3175
Australia

Business phone: +61 3 9767 5822
In the event of an Emergency contact:
Sydney CHEMTREC (24/7) +(61)-2 9037 2994
International CHEMTREC (24/7) 1-703-527-3887

Chemical nature: Blend of ingredients presented as an aerosol.
Trade Name: **92-802878 Q16 Mariner Gray**
Product Use: Touch-up paint for boats.
Creation Date: **October, 2011**
This version issued: **October, 2011** and is valid for 5 years from this date.

Section 2 - Hazards Identification**Statement of Hazardous Nature**

This product is classified as: Xn, Harmful. Xi, Irritating. F+, Highly Flammable. Hazardous according to the criteria of SWA.

Dangerous according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R11, R66, R67, R20/21, R36/38. Highly flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Harmful by inhalation and in contact with skin. Irritating to eyes and skin.

Safety Phrases: S29, S33, S38, S24/25. Do not empty into drains. Take precautionary measures against static discharges. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

SUSMP Classification: None allocated.

ADG Classification: Class 2.1: Flammable gases.

UN Number: 1950, AEROSOLS

Emergency Overview

Physical Description & Colour: Viscous black liquid.

Odour: Characteristic odour.

Major Health Hazards: harmful by inhalation and in contact with skin, irritating to eyes and skin, repeated exposure may cause skin dryness or cracking, vapours may cause drowsiness and dizziness.

Potential Health Effects**Inhalation:**

Short Term Exposure: Exposure to high concentrations of vapours may cause dizziness, breathing difficulty, headaches or respiratory irritation. Extremely high concentrations may cause drowsiness, staggering, confusion, unconsciousness, coma or death. Excessive inhalation of vapours can cause nasal and respiratory irritation. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.

Long Term Exposure: Vapours may cause drowsiness and dizziness.

Skin Contact:

Short Term Exposure: Available data shows that this product is harmful, but symptoms are not available. In addition product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:

Short Term Exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. This product, while believed to be not harmful, is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

MATERIAL SAFETY DATA SHEET

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: Xylene is Class 3 - unclassifiable as to carcinogenicity to humans.

Ethyl Benzene is classed 2b IARC - possibly carcinogenic to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Alkanes, C ₃₋₄	68475-59-2	24	not set	not set
Acetone	67-64-1	20-40	1185	2375
Xylene	1330-20-7	10-30	350	655
1-methoxy-2-acetoxyp propane	108-65-6	5-15	274	548
Ethyl benzene	100-41-4	1-3	434	543
Alkyd resin		10-30	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Quickly and gently blot away excess liquid. Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

Eye Contact: Quickly and gently blot material from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. This product is classified as flammable. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Any explosion will likely spread the fire to surrounding materials. Water spray may be used to cool drums involved in a fire, reducing the chances of an explosion. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical, foam. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses. Water spray should not be used except to keep down vapours or cool closed containers to prevent build-up of pressure. If water is used, fog nozzles are preferred.

MATERIAL SAFETY DATA SHEET

This revision issued: October, 2011

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus. Cool closed, undamaged containers exposed to fire with water spray.

Flash point:	22°C
Upper Flammability Limit:	13.1%
Lower Flammability Limit:	0.8%
Autoignition temperature:	No data.
Flammability Class:	Flammable.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in a cool (max 50°C), well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination and possible evaporation. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 2500kg or L of Dangerous Goods of Packaging Group II, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m³)	STEL (mg/m³)
Xylene	350	655
1-methoxy-2-acetoxypropane	274	548
Ethyl benzene	434	543
Acetone	1185	2375

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of an intrinsically safe extraction fan is suggested.

Eye Protection: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, chemical resistant plastic.

Respirator: Usually, no respirator is necessary when using this product. However if you have any doubts, an organic vapour cartridge respirator should be worn (consult with the Australian Standard mentioned above). Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour: Viscous black liquid.

MATERIAL SAFETY DATA SHEET

Issued by: Mercury Marine

Phone: +61 3 9767 5822

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

Odour:	Characteristic odour.
Boiling Point:	-18°C to 150°C at 100kPa
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	531g/L
Vapour Pressure:	737 kPa at 20°C
Vapour Density:	3.7
Specific Gravity:	0.761
Water Solubility:	Insoluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	7.7 (butyl acetate = 1)
Coeff Oil/water Distribution:	No data.
Autoignition temp:	No data.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated. Keep away from sources of sparks or ignition. Handle and open containers carefully. Any electrical equipment in the area of this product should be flame proofed.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Local Effects:

Target Organs: This product may attack blood cells, kidneys, liver, eyes.

Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Acetone	Conc>=20%: Xi; R36
Xylene: LD ₅₀ Oral, Rat 4300mg/kg	LD ₅₀ Dermal, Rabbit = 1700mg/kg
1-methoxy-2-acetoxopropane: LD ₅₀ Oral, Rat 8500mg/kg	LD ₅₀ Dermal, Rat = 5000mg/kg
Ethyl Benzene: LD ₅₀ Oral, Rat 3500mg/kg	LD ₅₀ Dermal, Rabbit = 20574mg/kg
Acetone: LD ₅₀ Oral, Rat 5800mg/kg	LD ₅₀ Oral, Mouse = 3000mg/kg
LD ₅₀ Oral, Rabbit = 5340mg/kg	LD ₅₀ Dermal, Guinea Pig = >9400mg/kg

In Delayed (Chronic and subchronic) studies, an 8 week inhalation study in rats showed no significant effects at 19,000ppm 5 days/week, and a 90 day oral toxicity in rats showed a no-observed-effects-level of 100mg/kg/day and a low-observed-effects-level of 500mg/kg/day based on increased liver and kidney weights and nephrotoxicity.

- Ames Assay (*S. typhimium*): Negative
- Chromosome Aberrations and Sister Chromatid Exchange Assays: Negative
- Point Mutation in Mouse Lymphoma Cells: Negative
- DNA Cell-binding Assay: Negative

Chronic overexposure to a component or components of this product has been suggested as a cause of the following effects in humans: Cardiac abnormalities

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Section 12 - Ecological Information

Insufficient data to be sure of status.

Acetone:

BOD: 1.22g O₂/g (5 days)

MATERIAL SAFETY DATA SHEET

Issued by: Mercury Marine

Phone: +61 3 9767 5822

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

Fish: LC₅₀ rainbow trout: 5540mg/LLC₅₀ bluegill sunfish: 8300mg/LDaphnia: EC₅₀ 10mg/L (24-48 hour)Bioconcentration factor is 1, suggesting bioconcentration in aquatic organisms is low. This was calculated using an experimental Log K_{ow} value of -0.24

Octanol/water partition coefficient: 0.58

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

ADG Code: 1950, AEROSOLS**Hazchem Code:** 2YE**Special Provisions:** 63, 190, 277**Limited quantities:** ADG 7 specifies a Limited Quantity value of 1000mL for this class of product.**Dangerous Goods Class:** Class 2.1: Flammable gases.**Packaging Group:** Not set**Packaging Method:** P003

Class 2.1 Flammable gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids) (where both flammable liquids and flammable gases are in bulk), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-flammable Non-Toxic gases), 3 (Flammable liquids except where both flammable liquids and flammable gases are in bulk), 6 (Toxic Substances), 8 (Corrosive Substances) 9 (Miscellaneous dangerous goods), Foodstuffs and foodstuff empties.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredients: Xylene, Ethyl benzene, are mentioned in the SUSMP.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the SWA document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

Nexreg Compliance Inc., November, 2010.

www.nexreg.com Phone (519)488-5126

MATERIAL SAFETY DATA SHEET

Issued by: Mercury Marine

Phone: +61 3 9767 5822

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)