BOC
A Member of The Linde Group

SAFETY DATA SHEET

 # 6032

Product Name **BOC WELD-GUARD HEAVY DUTY ANTI-SPATTER SPRAY**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier name	**BOC LIMITED (AUSTRALIA)**
Address	10 Julius Avenue, North Ryde, NSW, 2113, AUSTRALIA
Telephone	131 262, (02) 8874 4400
Fax	132 427 (24 hours)
Emergency	1800 653 572 (24/7) (Australia only)
Web site	http://www.boc.com.au/
Synonym(s)	1477 - MANUFACTURERS CODE • 6032 - SDS NUMBER • BOC ANTI-SPATTER SPRAY • CALLINGTON HAVEN • RELEASE AGENT • WELD-GUARD
Use(s)	AEROSOL DISPENSED • ANTISPATTER AGENT
SDS date	06 June 2014

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Risk Phrases

R22	Harmful if swallowed.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R44	Risk of explosion if heated under confinement.

Safety Phrases

S7	Keep container tightly closed.
S9	Keep container in a well ventilated place.
S13	Keep away from food, drink and animal feeding stuffs.
S23	Do not breathe gas/fumes/vapour/spray (where applicable).
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S35	This material and its container must be disposed of in a safe way.
S40	To clean the floor and all objects contaminated by this material use [appropriate material to be specified by the manufacturer].
S46	If swallowed, contact a doctor or Poisons Information Centre immediately and show container or label.
S51	Use only in well ventilated areas.
S53	Avoid exposure - obtain special instructions before use.

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN Number	1950	**Transport Hazard Class**	2.2
Packing Group	None Allocated	**Hazchem Code**	2Y

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Identification	Classification	Content (v/v)
DICHLOROMETHANE (METHYLENE CHLORIDE)	CAS: 75-09-2 EC: 200-838-9	Carc.;R40	>60%
ADDITIVE(S)	Not Available	Not Available	<30%

CARBON DIOXIDE (PROPELLANT)	CAS: 124-38-9 EC: 204-696-9	Not Available	1 to 10%

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

Advice to doctor Treat symptomatically.

First aid facilities Eye wash facilities should be available.

5. FIRE FIGHTING MEASURES

Flammability Non flammable. May evolve toxic gases (chlorides, phosgene, carbon oxides, hydrocarbons) when heated to decomposition. Vapour may form explosive mixtures with air.

Fire and explosion Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

Extinguishing Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.

Hazchem code 2Y

2 Water Fog (or fine water spray if fog unavailable)

Y Self Contained Breathing apparatus and protective gloves.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Wear Personal Protective Equipment (PPE) as detailed in Section 8.

Environmental precautions Prevent product from entering drains and waterways.

Methods of cleaning up Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all ignition sources.

References See Sections 8 and 13 for exposure controls and disposal.

7. STORAGE AND HANDLING

Storage Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for damaged/ leaking containers. Large storage areas should have appropriate ventilation systems. Store below 40°C.

Handling Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Carbon dioxide	SWA (AUS)	5000	9000	30000	54000
Carbon dioxide in coal mines	SWA (AUS)	12500	22500	30000	54000
Methylene chloride	SWA (AUS)	50	174	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
DICHLOROMETHANE (METHYLENE CHLORIDE)	Dichloromethane in urine	End of shift	0.3 mg/L

Reference: ACGIH Biological Exposure Indices

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face Wear splash-proof goggles.

Hands Wear PVA or viton (R) gloves.

Body When using large quantities or where heavy contamination is likely, wear coveralls.

Respiratory Where an inhalation risk exists, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator. Where the boiling point is < 65°C, use an AX filter type.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance CLEAR YELLOW LIQUID (AEROSOL DISPENSED)
Odour ETHER-LIKE ODOUR
Flammability NON FLAMMABLE
Flash point NOT RELEVANT
Boiling point > 39°C (initial)
Melting point NOT AVAILABLE
Evaporation rate NOT AVAILABLE
pH NOT AVAILABLE
Vapour density 2.93 (Air = 1)
Specific gravity 1.25 (Approximately)
Solubility (water) SOLUBLE
Vapour pressure 50.6 kPa @ 22°C
Upper explosion limit NOT RELEVANT
Lower explosion limit NOT RELEVANT
Partition coefficient NOT AVAILABLE
Autoignition temperature NOT AVAILABLE
Decomposition temperature NOT AVAILABLE
Viscosity NOT AVAILABLE
Explosive properties NOT AVAILABLE
Oxidising properties NOT AVAILABLE
Odour threshold NOT AVAILABLE
% Volatiles > 60 %

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended conditions of storage.

Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to avoid	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. sodium hydroxide), metals, heat and ignition sources. Also incompatible with powdered aluminium and magnesium.
Hazardous Decomposition Products	May evolve toxic gases (chlorides, phosgene, carbon oxides, hydrocarbons) when heated to decomposition.
Hazardous Reactions	Hazardous polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Harmful - irritant. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure may result in nerve (including brain), liver and lung damage. Dichloromethane is classified as possibly carcinogenic to humans (IARC Group 2B). Individuals with impaired cardiovascular function, or who are heavy drinkers or smokers should avoid exposure as dichloromethane reduces the blood's oxygen carrying capacity.
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.
Inhalation	Harmful - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea, dizziness and headache. High level exposure may result in breathing difficulties, anaesthesia, cardiac arrhythmias, pulmonary oedema, unconsciousness and possible respiratory failure. Metabolized to carbon monoxide which reacts with haemoglobin in the blood to prevent oxygen uptake and release. Dichloromethane is classified as possibly carcinogenic to humans (IARC Group 2B).
Skin	Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects.
Ingestion	Harmful. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, dizziness and drowsiness. Aspiration may result in chemical pneumonitis and pulmonary oedema. However, due to product form ingestion is considered unlikely. Maintain good personal hygiene standards.
Toxicity data	DICHLOROMETHANE (METHYLENE CHLORIDE) (75-09-2) LC50 (inhalation) 52 g/m³ (rat) LCLo (inhalation) 5000 ppm/2 hours (guinea pig) LD50 (ingestion) 1600 mg/kg (rat) LD50 (subcutaneous) 6460 mg/kg (mouse) LDLo (ingestion) 357 mg/kg human (CNS effects) LDLo (subcutaneous) 2700 mg/kg (rabbit) TCLo (inhalation) 500 ppm/8 hours (human - euphoria) CARBON DIOXIDE (PROPELLANT) (124-38-9) LCLo (inhalation) 9 pph/5M (human)

12. ECOLOGICAL INFORMATION

Toxicity	No information provided.
Persistence and degradability	No information provided.
Bioaccumulative potential	No information provided.
Mobility in soil	No information provided.
Other adverse effects	If dichloromethane released into the atmosphere will degrade by reaction with hydroxyl radicals (half life: 19 to 194 days). Dichloromethane evaporates from the near surface soil and water surface. Biodegradation is possible but will probably be quite slow when compared with the evaporation rate.

13. DISPOSAL CONSIDERATIONS

Waste disposal	For small amounts absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer for additional information.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN Number	1950	1950	1950
Proper Shipping Name	AEROSOLS	AEROSOLS	AEROSOLS
Transport Hazard Class	2.2	2.2	2.2
Packing Group	None Allocated	None Allocated	None Allocated

Environmental hazards No information provided

Special precautions for user

Hazchem code 2Y

GTEPG 2D1

EMS F-D, S-U

15. REGULATORY INFORMATION

Poison schedule Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Inventory Listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information

WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the time weighted average concentration (TWA) provided for single ingredients should be considered as a guide only and all due care exercised when handling.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

DICHLOROMETHANE VAPOUR may only produce a flammable mixture with air in a vacuum (1.7 bar @ 27°C). It may produce a flammable mixture with pure oxygen between 15.5% and 66.4% dichloromethane.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Revision history

Revision	Description
1.0	Initial SDS Creation

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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Revision: 1
SDS Date: 06 June 2014

End of SDS