

Chemwatch Independent Material Safety Data Sheet

Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 1 of 11

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

FAST DRY PRECISION CLEANER #263-8089

SYNONYMS

"RS Components", CP0377/1, "Fast Dry De-greaser"

PROPER SHIPPING NAME

FLAMMABLE LIQUID, N.O.S. (contains liquid hydrocarbons)

PRODUCT USE

Degreaser / cleaner.

SUPPLIER

Company: RS Components Company: RS Components

Address: Address:

Units 30 & 31 25 Pavesi Street

Warehouse World Smithfield 761 Great South Road NSW2164 Penrose Auckland AUS

> Telephone: 1300 656 636 Emergency Tel: 1800 039 008 Emergency Tel: 03 9573 3112

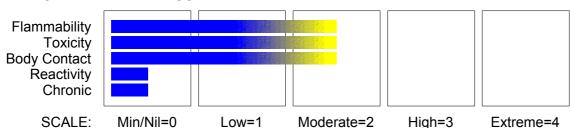
Fax: 1300 656 696

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

CHEMWATCH HAZARD RATINGS



Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 2 of 11 Section 2 - HAZARDS IDENTIFICATION



POISONS SCHEDULE

S₅

RISK

- Flammable.
- HARMFUL- May cause lung damage if swallowed.
- Inhalation may produce health damage*.
- May produce discomfort of the respiratory system*.
- Repeated exposure potentially causes skin dryness and cracking*.
- Vapours potentially cause drowsiness and dizziness*.
- * (limited evidence).

SAFETY

- Do not breathe gas/fumes/vapour/spray.
- Wear suitable protective clothing.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- To clean the floor and all objects contaminated by this material use water and detergent.
- Keep container tightly closed.
- Keep away from food drink and animal feeding stuffs.
- If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- This material and its container must be disposed of as hazardous waste.

NAME aliphatic hydrocarbon solvents CAS RN CAS RN 490

Section 4 - FIRST AID MEASURES

SWALLOWED

- For advice, contact a Poisons Information Centre or a doctor.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- · Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008 NA317TC

Version No:2.0 CD 2009/3 Page 3 of 11 **Section 4 - FIRST AID MEASURES**

CHEMWATCH 4544-63

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

NOTES TO PHYSICIAN

- For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:
- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- · Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology].

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- · Water spray or fog Large fires only.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- · Avoid spraying water onto liquid pools.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 4 of 11 Section 5 - FIRE FIGHTING MEASURES

FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
- Vapour may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2).

FIRE INCOMPATIBILITY

■ Avoid contamination with strong oxidising agents as ignition may result.

HAZCHEM: 3[Y]E

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

PVC chemical resistant type.

Respirator:

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- · Remove all ignition sources.
- · Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- · Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse / absorb vapour.
- · Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

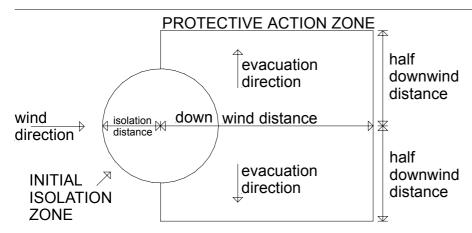
PROTECTIVE ACTIONS FOR SPILL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 5 of 11 Section 6 - ACCIDENTAL RELEASE MEASURES



From IERG (Canada/Australia)

Isolation Distance 25 metres **Downwind Protection Distance** 300 metres **IERG Number**

FOOTNOTES

- PROTECTIVE ACTION ZONE is defined as the area in which people are at risk of harmful exposure. This zone assumes that random changes in wind direction confines the vapour plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance.
- PROTECTIVE ACTIONS should be initiated to the extent possible, beginning with those closest to the spill and working away from the site in the downwind direction. Within the protective action zone a level of vapour concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable to take protective action and/or incurring serious or irreversible health effects.
- INITIAL ISOLATION ZONE is determined as an area, including upwind of the incident, within which a high probability of localised wind reversal may expose nearly all persons without appropriate protection to lifethreatening concentrations of the material.
- SMALL SPILLS involve a leaking package of 200 litres (55 US gallons) or less, such as a drum (jerrican or box with inner containers). Larger packages leaking less than 200 litres and compressed gas leaking from a small cylinder are also considered "small spills".

LARGE SPILLS involve many small leaking packages or a leaking package of greater than 200 litres, such as a cargo tank, portable tank or a "one-tonne" compressed gas cylinder.

- Guide 128 is taken from the US DOT emergency response guide book.
- IERG information is derived from CANUTEC Transport Canada.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid generating and breathing mist.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- · Avoid smoking, naked lights or ignition sources.
- Avoid generation of static electricity.
- DO NOT use plastic buckets.
- · Earth all lines and equipment.
- · Use spark-free tools when handling.
- Avoid contact with incompatible materials.

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008 NA317TC

Version No:2.0 CD 2009/3 Page 6 of 11

CHEMWATCH 4544-63

Section 7 - HANDLING AND STORAGE

- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- · Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

SUITABLE CONTAINER

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

■ Avoid storage with oxidisers.

STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
- Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical
- Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers dry chemical. foam or carbon dioxide) and flammable gas detectors.
- Keep adsorbents for leaks and spills readily available.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

In addition, for tank storages (where appropriate):

- Store in grounded, properly designed and approved vessels and away from incompatible materials.
- For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.
- Storage tanks should be above ground and diked to hold entire contents.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS















May be stored together

May be stored together with specific preventions 0:

X: Must not be stored together

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008 NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 7 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

MATERIAL DATA

FAST DRY PRECISION CLEANER #263-8089: ■ None assigned. Refer to individual constituents.

aliphatic hydrocarbon solvents REL TWA: 400 ppm

[Manufacturer]

PERSONAL PROTECTION







EYE

- · Safety glasses with side shields; or as required,
- · Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

■ Wear chemical protective gloves. eq. PVC gloves with barrier cream Wear safety footwear.

OTHER

- Overalls.
- Eyewash unit.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

■ General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air). aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift,

0.25- 0.5 m/s (50- 100 f/min)

0.5- 1 m/s (100- 200 f/min.)

Chemwatch Independent Material Safety Data Sheet

Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 8 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

plating acid fumes, pickling (released at low velocity into zone of active generation)

direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of

rapid air motion)

grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).

1- 2.5 m/s (200- 500 f/min.)

2.5- 10 m/s (500- 2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range

1: Room air currents minimal or favourable to capture

2: Contaminants of low toxicity or of nuisance value only.

3: Intermittent, low production.

4: Large hood or large air mass in motion

Upper end of the range

1: Disturbing room air currents

2: Contaminants of high toxicity

3: High production, heavy use

4: Small hood- local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear flammable liquid with a citrus odour; does not mix with water.

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Floats on water.

Molecular Weight: Not applicable Specific Gravity (water=1): 0.78

pH (1% solution): Not applicable

Evaporation Rate: Not available

Lower Explosive Limit (%): 0.5 Decomposition Temp (°C): Not

available

Boiling Range (°C): 161-197

Solubility in water (g/L):

Immiscible

Vapour Pressure (kPa): Not

available

Relative Vapour Density

(air=1): 4

Upper Explosive Limit (%): 6.6

State: Liquid

Melting Range (°C): Not available pH (as supplied): Not applicable

Volatile Component (%vol): Not

available

Flash Point (°C): 46

Autoignition Temp (°C): 190

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008

NA317TC

CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 9 of 11

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- · Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ The liquid is discomforting to the gastro-intestinal tract.

Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Considered an unlikely route of entry in commercial/industrial environments.

FYF

■ The liquid is slightly discomforting to the eyes and is capable of causing a mild, temporary redness of the conjunctiva (similar to wind-burn), temporary impairment of vision and/ or other transient eye damage/ulceration.

SKIN

■ The liquid is discomforting to the skin and is capable of causing skin reactions which may lead to dermatitis.

INHALED

■ The vapour/mist is discomforting to the upper respiratory tract and the material presents a hazard from repeated exposures over long periods.

Inhalation of vapour is more likely at higher than normal temperatures.

Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

CHRONIC HEALTH EFFECTS

■ Principal routes of exposure are usually by skin contact / eye contact and inhalation of vapour. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.

As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

TOXICITY AND IRRITATION

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

aliphatic hydrocarbon solvent blend Oral (rat) LD50: >5000 mg/kg*

Nil Reported.

*[Manufacturer]

Chemwatch Independent Material Safety Data Sheet

Issue Date: 31-Oct-2008 NA317TC CHEMWATCH 4544-63 Version No:2.0 CD 2009/3 Page 10 of 11

Section 12 - ECOLOGICAL INFORMATION

Refer to data for ingredients, which follows:

FAST DRY PRECISION CLEANER #263-8089:

Marine Pollutant: Not Determined

Good biodegradability and practically non-toxic to aquatic organisms.

■ DO NOT discharge into sewer or waterways.

[Manufacturer]

Ecotoxicity

Ingredient Persistence: Persistence: Air Bioaccumulation Mobility

Water/Soil

Fast Dry Precision No data

Cleaner #263- 8089

Section 13 - DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options and recycle where possible.
- Consult State Land Waste Management Authority for disposal.
- Incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID

HAZCHEM: 3[Y]E (ADG6)

Land Transport UNDG:

Class or division: 3 Subsidiary risk: None UN No.: 1993 UN packing group: III

Shipping Name:FLAMMABLE LIQUID, N.O.S. (contains liquid hydrocarbons)

Air Transport IATA:

ICAO/IATA Class: 3 ICAO/IATA Subrisk: □□
UN/ID Number: 1993 Packing Group: III

Special provisions: A3

Shipping Name: FLAMMABLE LIQUID, N.O.S. *(CONTAINS LIQUID

HYDROCARBONS)

Maritime Transport IMDG:

IMDG Class:3IMDG Subrisk:NoneUN Number:1993Packing Group:III

EMS Number: F- E, S- E Special provisions: 223 274 330 944 955 Limited Quantities: 5 L Marine Pollutant: Not Determined

Shipping Name: FLAMMABLE LIQUID, N.O.S.(contains liquid

hydrocarbons)

continued...

Chemwatch Independent Material Safety Data Sheet Issue Date: 31-Oct-2008 NA317TC

CHEMWATCH 4544-63
Version No:2.0
CD 2009/3 Page 11 of 11
Section 14 - TRANSPORTATION INFORMATION

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: S5

REGULATIONS

No data for Fast Dry Precision Cleaner #263-8089 (CW: 4544-63)

Section 16 - OTHER INFORMATION

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: 31-Oct-2008 Print Date: 5-Feb-2010

This is the end of the MSDS.