MATERIAL SAFETY DATA SHEET

VERSION 2 - CLP-GHS CLASSIFICATIONS (EC) No. 1272/2008

Ref: 139 – STRIP AWAY PRO – DCM Paint Remover

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY:

1.1 Product Name: **STRIP AWAY PRO – INDUSTRIAL PAINT STRIPPER – DCM based**

1.2 Applications: Dichloromethane (Methylene Chloride based) surface coatings remover, fast acting and effective in blistering and lifting most types of painted surface coating

1.3 Supplier: Palace Chemicals Ltd; Speke Hall Industrial Estate; Speke; Liverpool; L24 1YA
Tel: 0151 486 6101; Fax 0151 448 1982
e-mail: sales@palacechemicals.co.uk; web: www.palacechemicals.co.uk

1.4 Emergency Telephone No. Tel: 0151 486 6101 – Mon-Fri: 0800 - 1800

2. HAZARDS IDENTIFICATION:

2.1 Classification:
Regulation (EC) No. 1272/2008 (CLP) Carc. 2, Skin Irrit. 2 , Eye Irrit. 2 , STOT SE 3 , STOT RE 2

Signal Word: **DANGER**

2.2 Label elements:

Hazard statements:
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332+H312+H302: Harmful if inhaled, in contact with skin & if swallowed
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.

Precautionary statements:
P202: Do not handle until all safety precautions have been understood
P233 Keep container tightly closed.
P260: Do not breathe mist/vapours/spray.
P262: Do not get in eyes, on skin, or on clothing.
P271: Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P307+311 IF exposed: Call a POISON CENTER or doctor/physician.
P405 Store locked up.
P501 Dispose of contents/container to a licensed waste contractor

2.3 Other hazards: H373: May cause damage to liver / blood through prolonged or repeated exposure.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

3.1 Substances:

3.2 Mixtures: A blend of polar & hydrocarbon solvents with paraffin wax & thickening agents.

Name:	CAS No.:	EC No.	Concentration:	Classification:
Dichloromethane	000075-09-2	200-838-9	70 – 90%w/w	H315, H319, H335 H336, H351, H373
Methanol	67-56-1	200-659-6	< 8.0%w/w	H225; H301; - H311; H331;
Naptha hydro desulfurised heavy	64742-82-1	919-446-0	< 3.0% w/w	H226; H304; H411 -. H372; H336; EUH066 -

4. FIRST AID MEASURES:

4.1 Description of measures:

EYE CONTACT: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

INHALATION: Remove patient from exposure, keep warm and at rest. Administer oxygen if necessary. Apply artificial respiration if breathing has ceased or shows signs of failing. In the event of cardiac arrest apply external cardiac massage. Obtain immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. After contact with skin, wash immediately with plenty of water. If symptoms (irritation or blistering) occur obtain medical attention.

INGESTION: Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain immediate medical attention.

4.2 Acute & Chronic symptoms: High atmospheric concentrations will lead to anaesthetic effects and adverse effects on the central nervous system. Symptoms may include light headedness, nausea, vomiting and headache. Exposure to concentrations of 1000 ppm methylene chloride for 20 minutes causes light headedness. Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal.

4.3 Immediate medical attention: Remove contaminated clothing immediately. In case of accident by inhalation remove casualty to fresh air and keep at rest. Seek medical treatment when anyone has symptoms apparently due to inhalation, contact with skin or eyes, or swallowing. Adrenaline and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest

5. FIRE FIGHTING MEASURES:

5.1 Extinguishing media: Normal extinguishing media. As appropriate for surrounding fire. Water spray should be used only to cool containers.

5.2 Combustion Hazards: Explosive mixtures with air can be formed, but are difficult to ignite and require high intensity sources of heat, such as welding arcs, sparks and flames or high temperatures and pressures. Thermal decomposition and burning will evolve toxic and corrosive vapours of hydrogen chloride and phosgene. Containers may burst if overheated due to thermal expansion of the contents.

5.3 Advice for fire-fighters: A self contained breathing apparatus and full protective clothing must be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal protection: Ensure suitable personal protection during removal of spillages. Do not breathe vapour. Avoid contact with skin and eyes.

6.2 Environmental precautions: Avoid release to the environment. Use appropriate containment to avoid environmental contamination. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Spill removal methods: Do not allow to enter drains, sewers or watercourses. Adsorb onto earth or sand and remove to external safe place to allow evaporation of liquid. Transfer non-volatile remnants to a container for disposal or recovery.

6.4 References to other sections: See Section: 8, 13

7. HANDLING & STORAGE:

7.1 Safe handling precautions: Do not breathe vapour. Use only in well ventilated areas. The vapour may be invisible, heavier than air and spread along ground. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking.

7.2 (a) Safe storage conditions: Keep only in the original container in a cool, well-ventilated place. Keep away from direct sunlight. All bulk storage vessels should be made of steel and require a suitable vent or pressure relief valve and secondary containment to prevent uncontrolled losses from accidental release.

7.2 (b) Incompatible materials: Forms a detonable mixture with nitric acid. May react with certain amines, e.g. polyurethane catalysts. Prolonged contact with aluminium or light alloys may cause a reaction resulting in the generation of hydrogen chloride gas and heat.

7.3 Specific end uses: See section 16 for EU restrictions on use

8. EXPOSURE CONTROLS & PERSONAL PROTECTION:

8.1 Control parameters Substance:	8 hour exposure limit	15 minute exposure limit	Source. Type
Dichloromethane:	100ppm / 350mg/m3 (Sk)	300ppm / 1050mg/m3 (Sk)	WEL
Methanol:	200ppm(Sk) / 266mg/m3 (Sk)	250ppm(Sk) / 333mg/m3(Sk)	WEL

DNEL's - (Derived No effect levels) for workers (expressed as DCM):

DCM Exposure pattern:	Oral	Inhalation	Dermal
Industry - Long Term - Local effects		353 mg/m³	4750 mg/kg/day
Industry - Long Term - Systemic effects			
Industry - Short term - Local effects		706 mg/m³	
Industry - Short term - Systemic effects			
Consumer. - Long Term - Local effects		88.3 mg/m³	
Consumer. - Long Term - Systemic effects			
Consumer. - Short term - Local effects	0.06mg/kg/bw/day	353 mg/m³	2395 mg/kg bw/day
Consumer. - Short term - Systemic effects			

PNEC's - Predicted No effect concentration (Environment):

Compartment:	PNEC	Dose Descriptor
Fresh water -	0.54 mg/l Fresh water 0.194 mg/l Marine water 0.27 mg/l Intermittent releases 0.972 mg/kg Dry Sediment Fresh water 0.349 mg/kg Dry Sediment Marine water	
Sewage treatment -	26 mg/l sewage treatment plant	

8.2 Exposure controls:

Engineering controls: Provide adequate ventilation (FORCED & NATURAL) to ensure that the occupational exposure limit is not exceeded and exhaust fumes pose no threat to non users in adjacent areas, particularly in low level enclosures

Respiratory protection: Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Positive air supplied RPE is recommended.

Hand protection: Wear 17" long elbow length latex rubber (chlorinated) or nitrile gloves approved to EN 374 & EN 420 with a BTT rating of > 4 hrs.

Eye protection: BS 2092 Goggles should be worn for all applications to help prevent accidental face/eye contact and a full face visor where there is a risk of splashing or drips, along with head protection (PVC helmet) where overhead application is intended.

Skin protection: Wear suitable protective clothing and gloves. Gloves should be changed when permeation is likely. PVC has a breakthrough time of approximately 5 minutes for methylene chloride. Check with protective equipment manufacturer's data.

9. PHYSICAL & CHEMICAL PROPERTIES:

Appearance:	Semi-opaque viscous liquid	**Relative density:**	1.20 +/-0.02
Odour:	Strong DCM odour	**Water solubility:**	Slightly emulsifiable
Odour threshold:	approx 200ppm	**Solubility in oils:**	Yes
pH:	n/a	**Partition coefficient (Kow):**	n/d
Flash point:	n/a	**Auto-ignition temperature:**	n/a
Melting point:	-97'C	**Decomposition temperature:**	>40'C
Boiling point:	40'C	**Vapour pressure:**	355 at 20 Deg C
Evaporation rate:	< 1.5% w/w in 30 minutes	**Viscosity:**	5000 - 8000 mPa.s
Upper/Lower Flam limits:	LEL 18.8% v/v, UEL 19.5% v/v	**Explosive properties:**	n/a
Vapour density:	2.93	**Oxidising properties:**	n/a

10. STABILITY & REACTIVITY:

10.1 Conditions to avoid:	Keep away from direct sunlight.	**10.4 Reactivity:**	
10.2 Incompatible Materials:	Forms a detonable mixture with nitric acid.	**10.5 Chemical reactivity:**	Reacts with certain amines, e.g. PU catalysts.
10.3 Decomposition hazards:	hydrogen chloride , phosgene.	**10.6 Risk of hazardous reaction:**	low

11. TOXICOLOGICAL INFORMATION:

11.1 Information on toxicological effects: This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its' major components.

Routes of exposure:	Inhalation; ingestion & contact with skin
Eye damage/irritation:	Irritating to eyes – may cause serious damage
Reproductive toxicity:	No effects in fertility were seen in a two generation toxicity study. No developmental effects were seen in studies of rats and mice.
STOT single exposure:	Can be absorbed through skin but not in sufficient amounts to cause adverse effects. LD50 (rat, dermal) >2000 mg/kg bw
STOT repeat exposure:	Value used for Chemical Safety Assessment LC50 (8 hr mouse) 56230 mg/m³
Skin Corrosivity / Irritation:	Irritating to skin. Will remove the natural greases resulting in dryness, cracking and dermatitis. Repeated and/or prolonged skin contact may cause reddening, burning and blisters.
Respiratory:	High concentrations of vapour may be irritant to the respiratory tract. High atmospheric concentrations will lead to anaesthetic effects and adverse effects on the central nervous system. Symptoms may include light headedness, nausea, vomiting and headache. Exposure to high atmospheric concentrations (>1000 ppm) methylene chloride may cause light headedness. Exposure to very high concentrations may result in loss of consciousness and may cause an abnormal heart rhythm and prove suddenly fatal. Methylene chloride is converted to carbon monoxide in the body, which reduces the oxygen carrying capacity of the blood. This is reflected by a raised carboxy haemoglobin concentration in the blood.
Germ cell Mutagenicity:	Methylene chloride induces gene mutations in bacteria, but not in mammalian cells. It is clastogenic in vitro at high concentrations but not clastogenic in vivo via several routes of exposure and there is no evidence of it causing gene mutation in vivo. It is not classified as genotoxic.
Carcinogenicity:	Chronic inhalation studies in mice have shown increases in lung and liver tumours, when exposed to concentrations of methylene chloride well in excess of the occupational exposure limit. Extensive mechanistic research has shown that these carcinogenic effects are specific to the mouse and are not relevant to human health. This is due to well established differences in metabolic pathways between rodents and man. Several major studies on humans occupationally exposed to methylene chloride have shown no demonstrable link with cancer
Aspiration hazard:	No aspiration hazard

12. ECOLOGICAL INFORMATION:

12.1 Ecotoxicity:	Acute aquatic toxicity LC50 (96 hour) (Fish) Fresh water 193mg/l LC50 (96 hour) (Fish) Marine water 97mg/l LC50 (48 hour) Aquatic invertebrates: Fresh water 27 mg/l LC50 (48 hour) Aquatic invertebrates: Marine water 109 mg/l NOEC Fresh water Algae 550 mg/l
12.2 Bio-accumulative potential:	This has low potential for bioaccumulation. Bio-concentration factor (BCF) : 0.91 to 40 l/kg
12.3 Persistence & degradability:	Methylene chloride is not hydrolysed under normal environmental conditions. The product is slowly biodegradable in water. Methylene chloride is photochemically oxidised in the troposphere (half life, DT50 is calculated at 79.3 days). (TD50 = 14.2 d) The product is substantially removed in biological treatment processes. There is no evidence of inhibition to the aerobic treatment process at a concentration (mg/l) of 200
12.4 Mobility in soil:	Biodegradability: half-life (bacteria) approximately 18 months. The product is slowly biodegradable in soil.
12.5 PBT and vPvB result:	Not classified as PBT or vPvB
12.6 Other adverse effects:	None

13. DISPOSAL CONSIDERATIONS:

13.1 Waste treatment Methods: Disposal should be in accordance with local, state or national legislation. Transfer solvent residues to a labelled, sealed container for disposal or recovery. Application equipment such as brushes and cloths can be left exposed to air to allow full evaporation of solvent, until they are either laundered or allowed to dry completely. Waste disposal must be by an accredited contractor. Solvent residues must not be allowed to enter drains, sewers or watercourses or to contaminate the ground. Special waste provisions apply to the disposal of this product

14. TRANSPORT INFORMATION:

14.1 Transport Labels:

Regulatory Code (Land, Sea & Air):	ADR	IMDG	ICAO
14.1 UN No.:	2810	2810	2810
14.2 Proper shipping name:	TOXIC LIQUID, ORGANIC, NOS (CONTAINS DICHLOROMETHANE AND METHANOL)		
14.3 ADR Packing Group:	II	II	II
14.4 Transport Hazard Class:	6.1	6.1	6.1
14.5 Environmental hazards.	No	No	No
14.6 Special user precautions:	EAC/HIN Codes:2X/60	EAC/HIN Codes:2X/60	EAC/HIN Codes:2X/60

15. REGULATORY INFORMATION:

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

All components are listed as existing substances in Europe

UK Regulatory References:

Health and Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

Environmental Listing - Control of Pollution Act 1974. Control of Pollution (Special Waste Regulations) Act 1980.

Statutory Instruments:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes:

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

EU Legislation:

DECISION No 455/2009/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 May 2009 Amendment to Annex I to Directive 76/769/EEC – Applicable to sales within the European Union:

RESTRICTED TO INDUSTRIAL USE AND TO PROFESSIONALS APPROVED IN CERTAIN EU MEMBER STATES – VERIFY WHERE USE IS ALLOWED

Industrial users require the following provisions:

(a) effective ventilation in all processing areas, in particular for the wet processing and the drying of stripped articles: local exhaust ventilation at strip tanks supplemented by forced ventilation in those areas, so as to minimise exposure and to ensure compliance, where technically feasible, with relevant occupational exposure limits;

(b) measures to minimise evaporation from strip tanks comprising: lids for covering strip tanks except during loading and unloading; suitable loading and unloading arrangements for strip tanks; and wash tanks with water or brine to remove excess solvent after unloading;

(c) measures for the safe handling of dichloromethane in strip tanks comprising: pumps and pipework for transferring paint stripper to and from strip tanks; and suitable arrangements for safe cleaning of tanks and removal of sludge;

(d) personal protective equipment that complies with Directive 89/686/EEC comprising: suitable protective gloves, safety goggles and protective clothing; and appropriate respiratory protective equipment where compliance with relevant occupational exposure limits cannot be otherwise achieved;

(e) adequate information, instruction and training for operators in the use of such equipment.

Professional use allowed only under the following conditions:

For use, by specifically trained professionals, trained in the appropriate provisions for the protection of the health and safety including a requirement that a professional shall hold a certificate that is accepted by the Member State in which that professional operates, so as to demonstrate proper training and competence to safely use paint strippers containing dichloromethane. A professional benefiting from the derogation shall operate only in Member States which have made use of that derogation and the training referred to in paragraph 2 shall cover as a minimum:

(a) Awareness, evaluation and management of risks to health, including information on existing substitutes or processes, which

under their conditions of use are less hazardous to the health and safety of workers;
(b) Use of adequate ventilation;
(c) Use of appropriate personal protective equipment that complies with Directive 89/686/EEC.
Employers and self-employed workers shall by preference replace dichloromethane with a chemical agent or process which, under its conditions of use, presents no risk, or a lower risk, to the health and safety of workers.
Dangerous Substance Directive 67/548/EEC.
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations:

Users of this product are reminded of their duties under the current Control of Substances Hazardous to Health Regulations and a suitable and sufficient assessment of all the risk should be undertaken before using this product. The guidelines given in the HSE publication COSHH ESSENTIALS - Easy Steps To Control Chemicals gives sound advice for deciding safe working control measures.

Authorisations (Title VII Regulation 1907/2006) - No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006) - No specific restrictions of use are noted for this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this product.

16. OTHER INFORMATION:

Last revision date: 22nd May 2017

SDS No.: 139

List of abbreviations used in this SDS:

CAS	Chemical abstracts service
CLP	Classification, labelling & packaging regulation (EC) No. 1272/2008
DSD	Dangerous substances Directive 67/548/EEC
DPD	Dangerous Products Directive 1999/45/EC
PBT	Persistent, Bio-accumulative & Toxic
REACH	Registration, Evaluation, Authorisation & Restriction of Chemicals Regulation (EC) 1907/2006
vPvB	Very Persistent, very Bio-accumulative

References: Supplier safety data sheets; Croner up-dates; Vol VII of the Approved Supply list; EH 40.

Classification methods:

H Phrases in section 3:

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332+H312+H302: Harmful if inhaled, in contact with skin & if swallowed
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.
H373: May cause damage to liver / blood through prolonged or repeated exposure.

Training for workers: See requirements set out in EU legislation in section 15

Disclaimer: The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.