

Work Package Plan

**Former Debenhams Store,
Market Street, Manchester M60 1TA**

Version	Prepared by	Date	Approved by	Date	Signature
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Comments and Observations

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A Work Package Details

A1 Description of Work

Overview

This document defines a safe system of work for the removal of 9 redundant Escalators the former Debenhams store, Market Street Manchester M60 1TA.

Scope

1. Sign in with Site Management/Main Contractor Lift Services Oldham Ltd.
2. Liaise with site person in charge of work area, discuss scope of works with site person in charge and receive site briefing and any safety briefs.
3. Soft Strip Escalator – remove handrails, inner & outer decking's, balustrade profiles and glass panels and steps.
4. Unload escalator lifting/removal equipment into site hoarding.
5. Erect lifting tackle/removal equipment, raise the escalators by means of the lifting equipment clear of the seating angles and pits, prior to lowering on to skates.
6. Track escalators through building to Basement Level.
7. Strip and cut escalators into sections prior to awaiting removal transport.
8. Lift escalator sections from Basement and onto removal transport by means of a Hiab.
9. Dismantle lifting equipment and remove from site.

Classification of works

Task 1 – 8 all works completed during Normal working hours (to be confirmed)

Works Schedule

- Shift 1 – Completion of items 1 – 3
- Shift 2 – Completion of items 4
- Shift 3 – Completion of items 5
- Shift 4 – Completion of items 5
- Shift 5 – Completion of items 6
- Shift 6 – Completion of items 7
- Shift 7 – Completion of items 8

Start work arrangements.

Before accessing the site, the WPP and must be submitted and approved by the Principal Contractor (Lift Services Oldham Ltd)

Prior to work commencing all work permits to be in place by the principal contractor. The Senior escalator engineer/site supervisor must have a copy of the approved WPP with them at the time of commencing works or they will be declined permission to work.

NOTE: Due to local noise restrictions, no work that create external noise will be allowed prior to **07.30am (Monday – Friday inclusive) 08.00am (Saturdays) and 10.30am (Sundays)**

Works overview

All works in line with Lift Services Oldham Ltd Notice to Commence – Contract No:

Safe System of work check list.
Sub-contractor pre-start meeting.

After signing in, the Lead escalator engineer/Site supervisor will give a task specific briefing to all site operatives involved. All personnel to have received a site safety induction tailored for operatives working within the Ex Debenhams-Store and must sign the task briefing sheet to confirm their understanding. No works can commence until all personnel have had a full briefing by the Supervisor and their certification checked.

The first operation will be to “Soft strip” the handrail, inner decking profile, handrail profile and all ancillary components and remove the glass profiles (As Risk Assessment RME119) and remove the steps by means of hand winding the main drive unit.

ALL waste removed to be disposed on site in correct waste streams as advised by site contactors.

NOTE: Once the steps have been removed from the redundant escalator **NO ACCESS SHALL BE ALLOWED ON THE EXPOSED SOFFIT OF THE UNIT.** Access to the upper levels shall be undertaken by other means on site i.e staircases or other redundant escalators etc.

Then erect the lifting gantries at the upper and lower landings of the escalators, Both gantries will be a single span ROLLING gantry.

The 1st escalator (Kone RTK Ground - Basement) will be lifted off its seatings up to a height of 1.2mt, then moved forwards toward the bottom pit, lowering the top of the escalator onto skates on the Basement floor level.

Once the escalator has been lowered it will be striped into two sections by either unbolting the joining bolts or cutting. On completion of this operation the sections will be put raised back to the ground Floor level and placed on skates untill ready to move out across the site area and loaded with a suitable Hiab at the designated loading/unloading area (at rear of building access onto Tib Street).

The above will be repeated for the 2 Otis 506 escalators from Ground – Basement and the remainig units (2-off Ground to First floor, 2-off First floor to Second floor and 2-off Second to Third floor) to be manouvered through the openings created by the original units, lowered into the Basement for unbolting/cutting into 2 sections and raising back to the Ground Floor level..

Works overview (cont)

The escalators sections will then be tracked across the Ground floor to the loading area to the Tib street access and loaded onto trailers using a suitable Hiab and removed from site.

The temporary works will then be stripped down and removed from site via the loading/unloading bay (at rear of building access onto Tib Street).

The movement of the escalators within and from the building will be achieved by the use of a hand operated tissor.

For the movement of the machines, skates will be fitted to the escalator. The skates will run on steel runner plates which are approximately 250mm wide by 1500mm long by 3mm thick. These plates are to ensure a smooth running surface for the skates and do not afford any protection to any surface, nor are the plates load bearing.

1. Preparation Works

In order that the removal can be completed effectively and prior to the arrival of the removal team on site, the following activities will be required to be carried out by Lift Services Oldham Ltd in preparation for the removal, the works will have to be phased as the escalator power supply is required for the soft strip element of the works.

- The termination and removal of the electrical services and sprinkler system to the escalators.
- The breaking free of the escalators from the existing structure, removal of ALL external panels on the sides and underside of all escalators.
- Removal of any residual Asbestos around the escalator truss TBC when the escalators are raised from their seating's.
- NOTE The escalator engineers will require site of the Asbestos register and will confirm and sign the approved register on-site prior to commencing removals.
- Parking required for unloading/ loading of the removal equipment and escalator sections.
- The removal of a clear unimpeded access in all areas of working together with adequate headroom, all working areas are to be free of other trades.
- Throughout all areas of working, we will require adequate Task/mains lighting to be provided to ensure safe working conditions.



ALL Surrounding Cladding to be COMPLETELY removed exposing the escalator truss PRIOR to lifting from seatings and lowering to Basement level. To include all cladding to the underside and any material that may restrict removal.

2. Certification

All certification for the lifting equipment will be available at the time of the works with the site engineers.

All Plant to be identified as current tested and in-date covered by the Lifting equipment. inspection period by **YELLOW** marking of all equipment.

3. Escalator Information

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Esc No:	Type	Vertical Rise	Serving
1	Kone RTK	4.000 m	Ground - Basement
2	Otis 506	4.000 m	Ground - Basement
3	Otis 506	6.300 m	Ground - First
4	Otis 506	4.000 m	First - Second
5	Otis 506	4.000 m	Second - Third
6	Otis 506	4.000 m	Basement - Ground
7	Otis 506	6.300 m	First - Ground
8	Otis 506	4.000 m	Second - First
9	Otis 506	4.000 m	Third - Second

A2 Control of Activity Risks

Significant activity hazards and associated risks (to workers, drivers, and other site staff and to members of the public, including environmental/health risks) due to work type are identified in the table below along with control measures to be implemented.

Scope

1. Sign in with Main Contractor, liaise with site person in charge of work area, discuss scope of works with site person in charge and receive site briefing and any safety briefs.
2. Soft Strip Escalator – remove handrails, inner & outer decking's, balustrade profiles and glass panels and steps.
3. Unload escalator lifting/removal equipment into site hoarding.
4. Erect lifting tackle/removal equipment; raise the escalators by means of the lifting equipment clear of the seating angles and pits.
5. Split escalator into sections for removal.
6. Track escalator through building to awaiting removal transport.
7. Lift escalator onto removal transport by means of a Hiab.
8. Dismantle lifting equipment and remove from site.

Hazards/Risk Identified	Controls Measures	Tasks in which the risks need to be briefed							
		1	2	3	4	5	6	7	8
Injury due to slips, trips, and falls	Take due care and attention. Full PPE to be worn. Access and Egress routes to be kept clear and tidy throughout the repair works. Access between floor levels NOT to be carried out by climbing the exposed step band bars. Ensure works areas are sufficiently illuminated. Highlight trip areas before taking equipment/tools onto site. Report any unsafe places/ tripping hazards to site supervisors. Avoid tracking over manholes and access covers, which are susceptible to fractures. Exclusion zones to be set up around the footprint of the escalator including the Upper landing and lower pit, creating a safe working zone. Barriers and warning signage installed. Good housekeeping - Ensure working areas are kept clean and clear of equipment and unnecessary materials.	X	X	X	X	X	X	X	X
Tiredness, poor visibility when working	Area of works to be adequately illuminated using temporary portable lighting if necessary. Access to welfare units. Close Supervision.	X	X	X	X	X	X	X	X

LIFT SERVICES

Hazards/Risk Identified	Controls Measures	Tasks in which the risks need to be briefed							
		1	2	3	4	5	6	7	8
Electric shock, static discharge	Lead engineer to ensure any electrical switchgear/fuse boxes located within works area are isolated. All services which remain live must be clearly identified and all operatives notified of their existence. All tools to run on 110v power supply. Leads, plugs and tools to be checked daily before use. Leads kept where they can't be damaged. Any defective items removed from site. All plant to be PAT tested and certified.			X	X	X	X	X	X
Misuse of equipment causing injury to operator	Only trained and competent operatives to utilize tools. All operators of plant will be required to provide proof of competency certificates (CPCS) prior to commencement of work. Task specific PPE to be worn.			X	X	X	X	X	X
Hazardous Substances risk of injury/ illness	Ensure personal hygiene arrangements are adequate. PPE to be always worn. Smoking and eating is prohibited.			X	X	X	X	X	X
Musculoskeletal injury due to manual handling	Use of mechanical means where possible. Manual handling should be kept to a minimum. Assessment of load prior to lifting. Lifting within individuals' capability, multiple persons used to assist if required. PPE to be worn including gloves and steel toe capped boots			X	X	X	X	X	X
Accident involving passengers/ operatives with pallet trucks and trolleys	Transportation of materials/equipment to and from work site only to be performed in agreement with the site management.			X	X	X	X	X	X
Working at Height	All works complete behind the site fall protection barriers, away from open voids. Where they are required to go within 1 m of the open void fall protection harness will be worn.			X	X	X	X	X	X
Crushing	All operatives to be trained and competent, in the lifting equipment erection and removal process. Clear communication between engineers when lifting the Escalators.		X	X	X	X	X	X	X

A3 Resources

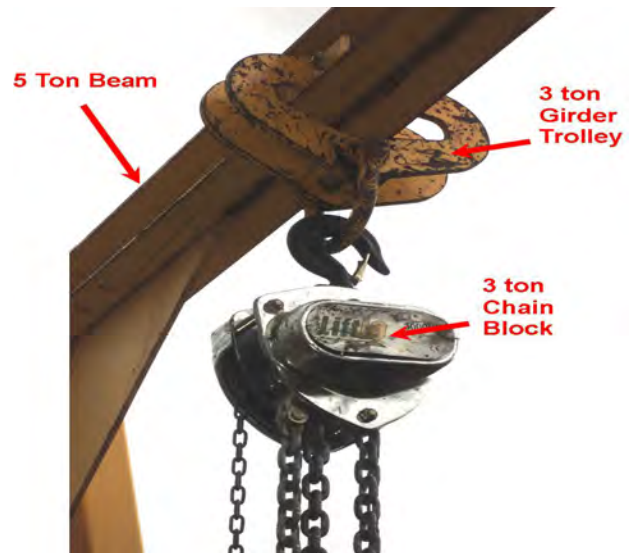
Typical Plant/Equipment list:

Removal Equipment

- 1 x 5 ton, 2.4mt double span beam
- 1 x 5 ton, 3.5mt double span beam
- 1 x 5 ton, 4.2mt double span beam
- 2 x 5 ton 'A' frames
- 2 x 3 ton girder trolleys
- 4 x 3 ton 12m Electric fall chain blocks
- 1 x 5 ton, 2.4mt double span beam
- 1 x 5 ton, 3.5mt double span beam
- 1 x 5 ton, 4.2mt double span beam
- 2 x 5 ton 'A' frames
- 2 x 3 ton girder trolleys
- 2 x 3 ton 3m fall chain blocks

General

- 2 x 5 ton toe jacks
- 2 x 5.0mt Larssen trackway
- 1 x 1.6 ton hand operated tirfor
- 1 x 5 ton steering skate
- 2 x Jacks
- 2 x Crib modules
- 12 x Steel runner plates
- Various soft & chain slings
- 8 x Bow shackles
- Timber packing
- 8 x 6 Ton 6 wheeled skates
- 4 x 2 ton skates
- Evolution Cold Cutting saws
- Oxy-Propane Cutting equipment
- Reciprocating saws



All the lifting frames included within this method statement are designed to be stripped down for manual handling. We will require adequate access both on and off site in order to erect and dismantle each unit. All the equipment will be subject to structural engineers approval.

The lifting beams will be supplied with girder trolleys, chain hoists and shackles and will be provided with LOLER test certificates (no lifting equipment forms part of site temporary works). All certification will be available for inspection on the day of the installation.

General – All tasks

- Maintenance Barriers.
- 110v Transformer.
- 110v Drill.
- Cold cutting equipment (reciprocating/TCT saws)
- Multi Meter.
- Torque wrenches and sockets.
- General hand tools.
- General Degreaser Cleaner.
- Cotton Rags.

- 110v or Battery-operated task Lighting.

Mechanical Aids.

- As above list

Typical Manpower:

- 1 No Foreman and 2-3 No. Engineer

This list is not exhaustive.

- Operatives shall be trained, competent/certificated in the use of plant/equipment and certified by Construction Skills Certification Scheme (CSCS passport to work).
- Awareness training shall be given by way of Toolbox talks which operatives will sign to acknowledge attendance. Records of all toolbox talks given to operatives shall be stored within the Escalator engineers' Head office.

PPE required:

Mandatory PPE equipment to include Hardhat/bump cap, High visibility vest or jacket, Steel toecap safety boots, Lightweight abrasion resistant gloves and Low impact safety glasses and Face Fit Masks.

To be worn in accordance with Main contractors PPE & Work wear Policy.

A4 Permits

- WPP – approved by main contractor before work commences.
- Task Briefing Sheet – All operatives briefed by the Lead escalator engineer.

B Site Details

B1 Access

Access and Egress via the Ground floor main entrance doors leading out onto the precinct or via the loading bay at Tib Street at the rear of the store.

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B2 Site Layout



B3 Control of Site Risks

Significant site hazards and associated risks to workers, drivers, and other staff and to members of the public, including environmental/health risks, due to specific work location are identified in the table below along with control measures to be implemented.

Scope

1. Sign in with Main Contractor, liaise with site person in charge of work area, discuss scope of works with site person in charge and receive site briefing and any safety briefs.
2. Soft Strip Escalator – remove handrails, inner & outer decking's, balustrade profiles and glass panels and steps.
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4. Erect lifting tackle/removal equipment; raise the escalators by means of the lifting equipment clear of the seating angles and pits.
5. Split escalator into sections for removal.
6. Track escalator through building to awaiting removal transport.
7. Lift escalator onto removal transport by means of a Hiab.
8. Dismantle lifting equipment and remove from site.

Hazards/Risk Identified	Controls Specified	Tasks where risks need to be briefed							
		1	2	3	4	5	6	7	8
Damage to site structure during lifting operations	Operatives trained and competent in lifting operations and procedures.		X	X	X	X	X	X	X
Risk to the other trades working in the escalator site.	Work to be carried out within defined worksite.		X	X	X	X	X	X	X
Endangerment of site operatives Working the escalator site. High street environment	All work activities to be within an exclusion zone behind site hoarding and or using temporary barriers and under the supervision of the Lead engineer. No access between levels from the exposed step bars within the escalator step band.		X	X	X	X	X	X	X
Working at Height	All works complete behind the site fall protection barriers, away from open voids. Where they are required to go within 1 m of the open void fall protection harness will be worn.		X	X	X	X	X	X	X

Hazards/Risk Identified	Controls Specified	Tasks where risks need to be briefed							
		1	2	3	4	5	6	7	8
Contaminated Ground/ Weil's disease leading to infection/illness	Gloves to be always worn. Wash hands before eating, drinking, or smoking (No smoking allowed on site in and no eating allowed on site). Cover breaks in skins with waterproof plaster/bandage. Staff to get toolbox talks on Leptospirosis.		X	X	X	X	X	X	X
Hazardous substances infection/illness	Ensure personal hygiene arrangements are adequate. PPE to be always worn. Smoking and eating is prohibited.		X	X	X	X	X	X	X

B4 Protection and Isolation

Task number	Task	High Street Environment
1	Sign in with Lift Services Oldham Ltd /Main Contractor, liaise with site person in charge of work area, discuss scope of works with site person in charge and receive site briefing and any safety briefs.	X
2	Soft Strip Escalator – remove handrails, inner & outer decking's, balustrade profiles and glass panels and steps	X
3	Unload escalator lifting/removal equipment into site hoarding.	X
4	Erect lifting tackle/removal equipment, raise the escalators by means of the lifting equipment clear of the seating angles and pits.	X
5	Split escalator into 2 sections for removal.	X
6	Track escalator through building to awaiting removal transport.	X
7	Lift escalator onto removal transport by means of a Hiab.	X
8	Dismantle lifting equipment and remove from site.	X

B5 On-track Plant and Machinery Movements

All redundant materials to be removed at the Ground Floor level between Market Street and Tib Street. Access and egress routes to be confirmed by the principal contractor prior to commencement of any works on site. No movement of materials to be carried out outside the building outside normal working hours (TBC)

B6 Communication & Contact Details

Engineering & Site Contacts				
Organisation	Position/Title	Name	Location	Office/Mobile Telephone Number
Principal Contractor Lift Services Oldham Ltd				
Lift services Oldham Ltd	Site Manager	Robert Besnon	Site	07850947204
Lift Services Oldham Ltd	QS	Liam Dwayre	Site	07891583620
Lift Services Oldham Ltd	Contract Manager	Liam Dwayre	Site	07891583620
Lift services Oldham Ltd	H&S Manager	Ardren Kirk	Site	07377988610
Russell WBHO	Site Manager	Peter Girven	Site	07392091466
Engineering team	Operations Manager	Sue Theaker	Head office	01535 957630
Engineering team	Installation and H&S Supervisor	Terry Hutton	Head office	01535 957630
Engineering team	Site Supervisor	Scott Cole	Site	07485 301512

B7 Emergency Arrangements

All accidents, incidents and near misses must be reported immediately to the principal contractor and the escalator engineering site supervisor.

In event of emergency services being required, these will be contacted via 999.

All works within the site are under the control of the site fire alarm.

In the event of an emergency, personnel are advised to:

- Raise the alarm.
- Switch off and make safe all plant and equipment.
- Vacate the area.

LIFT SERVICES

- Notify the site supervisor who will co-ordinate with the emergency services and facilitate first aid if appropriate.
- Report to the assembly point and wait for further instruction.

Site appointed first aider from Severn Insulation Co Ltd will be advised during the site induction.

All accidents and incidents including near misses must be reported to the H&S Supervisor and the Severn Insulation Co Ltd H&S Safety manager who is responsible for recording and investigating the event in accordance with RIDDOR requirements.

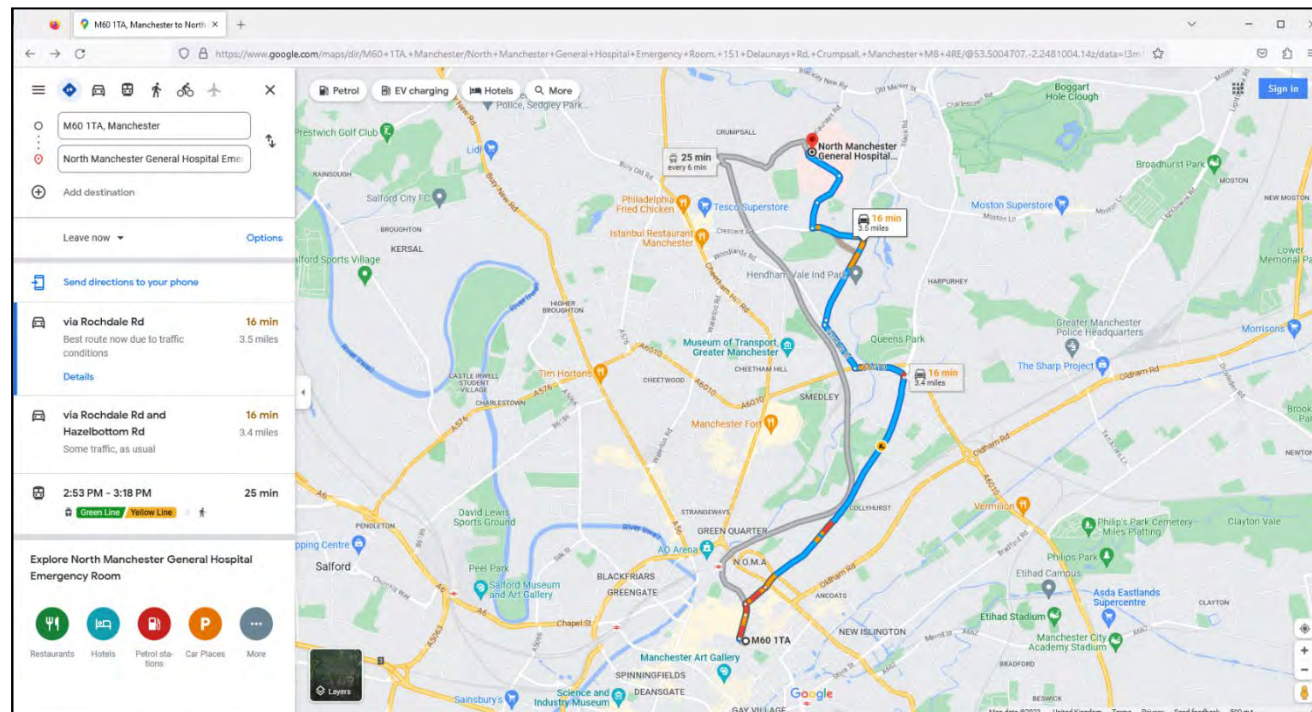
Emergency Contact Numbers	
Emergency Service	Telephone Number
Site Main Number	07850947204
Site Office	07891583620
Emergency Services Police, Fire and Ambulance	999

LIFT SERVICES

**Nearest hospital with accident
and emergency department:**

Address:

North Manchester General Hospital Emergency Room,
151 Delaunay's Rd,
Crumpsall,
Manchester
M8 4RE
Tel: 0161 795 4567



B8 Welfare

First aid and welfare facilities are available in the Site office.

B9 Interfaces

All areas used shall be cleared and swept at the end of each shift. Materials and plant shall only be moved between area with prior approval and agreed routes.

C Briefing

C1 Briefing Arrangements

Prior to works commencing, all personnel will be given a task briefing by the Lead escalator engineer.

All personnel will be required to attend the briefing and sign a confirmation sheet to confirm their understanding of the risks identified and the control measures.

A Task Briefing record is to be completed and a hard copy kept with the work file.

Appendices

Appendix A – WPP briefing sheets

Appendix B – Training Certificates

Appendix C – Safety Data Sheets

Appendix D – LOLER/PUWER

Appendix E – Risk Assessments

Appendix A - Work Package Plan Briefing Register – Training Competence

This register is to be read, understood, and signed by all staff involved with the Escalator removals at Ex Debenhams Manchester.

Date	Name	Qualification	Signature

Appendix B - Training Certificates

All Training Certificates available in One Drive

Appendix C – Safety Data Sheet

SAFETY DATA SHEET		Airgas an Air Liquide company
Propane		
Section 1. Identification		
GHS product identifier	: Propane	
Chemical name	: propane	
Other means of identification	: Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.	
Product type	: Liquefied gas	
Product use	: Synthetic/Analytical chemistry.	
Synonym	: Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.	
SDS #	: 001045	
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253	
24-hour telephone	: 1-866-734-3438	
Section 2. Hazards identification		
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Classification of the substance or mixture	: FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Liquefied gas	
GHS label elements		
Hazard pictograms	 	
Signal word	: Danger	
Hazard statements	: Extremely flammable gas. Contains gas under pressure; may explode if heated. May cause frostbite. May displace oxygen and cause rapid suffocation. may form explosive mixtures with air.	
Precautionary statements		
General	: Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Always keep container in upright position. Approach suspected leak area with caution.	
Prevention	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
Response	: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leakage, eliminate all ignition sources.	
Storage	: Protect from sunlight. Store in a well-ventilated place.	
Date of issue/Date of revision	: 11/15/2020	Date of previous issue : 10/5/2020
Version	: 1.02	1/12

Propane

Section 2. Hazards identification

- Disposal** : Not applicable.
- Hazards not otherwise classified** : Liquid can cause burns similar to frostbite.

Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Chemical name** : propane
- Other means of identification** : Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.
- Product code** : 001045

CAS number/other identifiers

- CAS number** : 74-98-6

Ingredient name	%	CAS number
Propane	100	74-98-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Liquid can cause burns similar to frostbite.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

Date of issue/Date of revision : 11/15/2020 Date of previous issue : 10/5/2020 Version : 1.02 2/12

Propane

Section 4. First aid measures

- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
Ingestion : Ingestion of liquid can cause burns similar to frostbite.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: frostbite
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following: frostbite
Ingestion : Adverse symptoms may include the following: frostbite

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

- Specific hazards arising from the chemical** : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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Section 6. Accidental release measures

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Propane	NIOSH REL (United States, 10/2016). TWA: 1800 mg/m³ 10 hours. TWA: 1000 ppm 10 hours. OSHA PEL (United States, 5/2018). TWA: 1800 mg/m³ 8 hours. TWA: 1000 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 1800 mg/m³ 8 hours. TWA: 1000 ppm 8 hours. ACGIH TLV (United States, 3/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.
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Section 8. Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. If contact with the liquid is possible, insulated gloves suitable for low temperatures should be worn. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Thermal hazards : If there is a risk of contact with the liquid, all protective equipment worn should be suitable for use with extremely low temperature materials.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas.
Color : Colorless.
Odor : Odorless.BUT MAY HAVE SKUNK ODOR ADDED.
Odor threshold : Not available.
pH : Not available.
Melting point : -187.6°C (-305.7°F)
Boiling point : -42.1°C (-43.8°F)

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Section 9. Physical and chemical properties

Critical temperature	: 96.55°C (205.8°F)
Flash point	: Closed cup: -104°C (-155.2°F) Open cup: -104°C (-155.2°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidizing materials.
Lower and upper explosive (flammable) limits	: Lower: 1.8% Upper: 8.4%
Vapor pressure	: 109 (psig)
Vapor density	: 1.6 (Air = 1)
Specific Volume (ft³/lb)	: 8.6206
Gas Density (lb/ft³)	: 0.116 (25°C / 77 to °F)
Relative density	: Not applicable.
Solubility	: Not available.
Solubility in water	: 0.0244 g/l
Partition coefficient: n-octanol/water	: 1.09
Auto-ignition temperature	: 287°C (548.6°F)
Decomposition temperature	: Not available.
Viscosity	: Not applicable.
Flow time (ISO 2431)	: Not available.
Molecular weight	: 44.11 g/mole
Aerosol product	
Heat of combustion	: -46012932 J/kg

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas.
Incompatible materials	: Oxidizers
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact : Liquid can cause burns similar to frostbite.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
- Ingestion : Ingestion of liquid can cause burns similar to frostbite.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact : Adverse symptoms may include the following:, frostbite
- Inhalation : No specific data.
- Skin contact : Adverse symptoms may include the following:, frostbite
- Ingestion : Adverse symptoms may include the following:, frostbite

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

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Section 11. Toxicological information

Potential chronic health effects

Not available.

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Propane	1.09	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})	: Not available.
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Other adverse effects	: No known significant effects or critical hazards.
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Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.
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Propane					
Section 14. Transport Information					
	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1978	UN1978	UN1978	UN1978	UN1978
UN proper shipping name	PROPANE SEE ALSO PETROLEUM GASES, LIQUEFIED	PROPANE	PROPANE SEE ALSO PETROLEUM GASES, LIQUEFIED (propane)	PROPANE	PROPANE
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Additional information

DOT Classification

Limited quantity
Yes.

Packaging instruction

Passenger aircraft

Quantity limitation: Forbidden.

Cargo aircraft

Quantity limitation: 150 kg

Special provisions

19, T50

For domestic transportation only, UN1075 may be substituted for the UN number shown as long as the substitution is consistent on package markings, shipping papers, and emergency response information. See 49 CFR 172.102 Special Provision 19.

Containers of NON-ODORIZED liquefied petroleum gas must be marked either NON-ODORIZED or NOT ODORIZED as of September 30, 2006. [49 CFR 172.301(f), 326(d), 330(c) and 338(e)]

TDG Classification

Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).

Explosive Limit and Limited Quantity Index 0.125

ERAP Index 3000

Passenger Carrying Vessel Index 65

Passenger Carrying Road or Rail Index Forbidden

Special provisions 29, 42

IATA

Quantity limitation Passenger and Cargo Aircraft: Forbidden. Cargo Aircraft Only: 150 kg.

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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Section 14. Transport information

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Air Act (CAA) 112 regulated flammable substances: propane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

State regulations

Massachusetts : This material is listed.

New York : This material is not listed.

New Jersey : This material is listed.

Pennsylvania : This material is listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

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Section 15. Regulatory information

Japan	: Japan inventory (ENCS): This material is listed or exempted. Japan inventory (ISHL): This material is listed or exempted.
New Zealand	: This material is listed or exempted.
Philippines	: This material is listed or exempted.
Republic of Korea	: This material is listed or exempted.
Taiwan	: This material is listed or exempted.
Thailand	: Not determined.
Turkey	: This material is listed or exempted.
United States	: This material is active or exempted.
Viet Nam	: This material is listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	2
Flammability	4
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 1	Expert judgment
GASES UNDER PRESSURE - Liquefied gas	Expert judgment

History

Date of printing	: 11/15/2020
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Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

References

- : Not available.

Other special considerations

- : The information below is given to call attention to the issue of "Naturally occurring radioactive materials". Although Radon-222 levels in the product represented by this MSDS do not present any direct Radon exposure hazard, customers should be aware of the potential for Radon daughter build up within their processing systems, whatever the source of their product streams. Radon-222 is a naturally occurring radioactive gas which can be a contaminant in natural gas. During subsequent processing, Radon tends to be concentrated in Liquefied Petroleum Gas streams and in product streams having a similar boiling point range. Industry experience has shown that this product may contain small amounts of Radon-222 and its radioactive decay products, called Radon "daughters". The actual concentration of Radon-222 and radioactive daughters in the delivered product is dependent on the geographical source of the natural gas and storage time prior to delivery. Process equipment (i.e. lines, filters, pumps and reaction units) may accumulate significant levels of radioactive daughters and show a gamma radiation reading during operation. A potential external radiation hazard exists at or near any pipe valve or vessel containing a Radon enriched stream, or containing internal deposits of radioactive material due to the transmission of gamma radiation through its wall. Field studies reported in the literature have not shown any conditions that subject workers to cumulative exposures in excess of general population limits. Equipment emitting gamma radiation should be presumed to be internally contaminated with alpha emitting decay products which may be a hazard if inhaled or ingested. Protective equipment such as coveralls, gloves, and respirator (NIOSH/MHSA approved for high efficiency particulates and radionuclides, or supplied air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination, ingestion, or inhalation of any residues containing alpha radiation. Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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SAFETY DATA SHEET No Nonsense Heavy Duty Degreaser

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME No Nonsense Heavy Duty Degreaser
INTERNAL ID E0687
APPLICATION Detergent Cleaning agent
SUPPLIER Mykal Industries Ltd
Farnsworth House, Morris Close,
Park Farm Industrial Estate,
Wellingborough, Northants, NN8 8XF
Tel, 0044(0)1933 402822
Fax, 0044(0)1933 402488
e-mail, enquiries@mykal.co.uk

2 HAZARDS IDENTIFICATION

Irritating to eyes.
CLASSIFICATION (1999/45) Xi,R36.
ENVIRONMENT
The product is not expected to be hazardous to the environment.
HUMAN HEALTH
May cause minor irritation on eye contact.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
Fatty Alcohol Ethoxylate		68439-45-2	5-10%	Xn:R22, Xi:R41.
Mono ethanolamine	205-483-3	141-43-5	1-5%	Xn:R20/21/22, C:R34.
Tetra Potassium Diphosphate	230-785-7	7320-34-5	5-10%	Xi,R36.

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest EC Directives.

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN

No specific first aid measures noted.

INHALATION

Not relevant.

INGESTION

Contact physician if larger quantity has been consumed.

SKIN CONTACT

Rinse with water.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide, dry powder or water fog. The product is non-combustible.

SPECIAL FIRE FIGHTING PROCEDURES

Ventilate closed spaces before entering them.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

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SPECIFIC HAZARDS

Not relevant.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

In case of spills, beware of slippery floors and surfaces.

ENVIRONMENTAL PRECAUTIONS

Not relevant considering the small amounts used.

SPILL CLEAN UP METHODS

Flush with plenty of water to clean spillage area.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

No specific usage precautions noted.

STORAGE PRECAUTIONS

No special storage precautions noted. Store above freezing.

STORAGE CLASS

Unspecified storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
Mono ethanolamine	WEL	1 ppm(Sk)	2.5 mg/m3(Sk)	3 ppm(Sk)	7.6 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

PROCESS CONDITIONS

Provide eyewash station.

RESPIRATORY EQUIPMENT

Respiratory protection not required.

HAND PROTECTION

For prolonged or repeated skin contact use suitable protective gloves.

EYE PROTECTION

Not relevant.

HYGIENE MEASURES

When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear, yellowish liquid		
ODOUR	Slight odour		
BOILING POINT (°C)	100	MELTING POINT (°C)	0
RELATIVE DENSITY	1.05	pH-VALUE, CONC. SOLUTION	12

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

CONDITIONS TO AVOID

Avoid contact with strong oxidisers.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions.

11 TOXICOLOGICAL INFORMATION

INHALATION

Unlikely to be hazardous by inhalation because of the low vapour pressure of the substance at ambient temperature.

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INGESTION

No harmful effects expected in amounts likely to be ingested by accident.

SKIN CONTACT

Skin irritation is not anticipated when used normally.

EYE CONTACT

Splashes may irritate.

HEALTH WARNINGS

This product has low toxicity. Only large volumes may have adverse impact on human health.

ROUTE OF ENTRY

Skin and/or eye contact.

MEDICAL SYMPTOMS

No specific symptoms noted.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product is not expected to be hazardous to the environment.

BIOACCUMULATION

The product does not contain any substances expected to be bioaccumulating.

DEGRADABILITY

The product is biodegradable. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

WATER HAZARD CLASSIFICATION

WGK 0

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Wash to drains with lots of water.

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID). Tariff Code 3402 9010

15 REGULATORY INFORMATION

LABELLING



Irritant

RISK PHRASES

R36 Irritating to eyes.

SAFETY PHRASES

S2 Keep out of the reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S46 If swallowed, seek medical advice immediately and show this container or label.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.

ENVIRONMENTAL LISTING

No listing noted.

EU DIRECTIVES

Dangerous Preparations Directive 1999/45/EC.

GUIDANCE NOTES

Workplace Exposure Limits EH40.

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

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No Nonsense Heavy Duty Degreaser

16 OTHER INFORMATION

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SAFETY DATA SHEET STATUS:

Approved.

RISK PHRASES IN FULL:

R34	Causes burns.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

APPENDIX D – LOLER/PUWER

Certification will be provided prior to commencing works available in One Drive.

HEALTH & SAFETY AND ENVIRONMENTAL RISK ASSESSMENT

Risk Assessment Title:		Oxy-Propane Cutting				Risk Assessment ID No:		RME 162	
Location:		Site Working				Associated Method Statement:		MME 162	
Scope of assessment:		To identify the hazards and activities of using Oxy-Propane Cutting Equipment							
Likelihood		Severity				Risk Likelihood x Severity		Likelihood	3 
1=	Unlikely	1=	Minor injury, minor environmental		Low (Green) =	1 to 2			
2=	Possible	2=	Major injury, significant environmental event		Medium (Blue) =	3 to 4			
3=	Likely	3=	Fatality, major environmental event		High (Red) =	6 to 9			

APPROVALS

Compiled by	Terry Hutton	Reviewed by	Dave Harrison	Approved by	Dave Harrison
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VERSION HISTORY

VERSION	DATE	DESCRIPTION OF CHANGE	CHANGED BY	APPROVED BY
A	10/02/2023	First Draft	Terry Hutton	Dave Harrison

Persons at Risk

EAP	Engineers and Authorized Personnel
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LIFT SERVICES

CPV	Customers/Personnel Visitor
OT	Other Trades
GP	General Public
ENV	Environment

LIFT SERVICES

What are the hazards identified		Who might be harmed and how	Un-mitigated risk			What Control / Protection measures are already in place.	Mitigated risk			Any Further Action Yes / No
			L	S	R		L	S	R	
1	Damage to eyes from welding flash	EAP, CPV, OT, GP Operatives, other contractors - damage to vision, possible blindness	3	3	H	- There are to be no other contractors in the area. - Flash back arresters are to be fitted to the equipment and checked as part of the daily inspection. - Welding mask with correct grade lens must be worn when carrying out this activity. - Where practical, suitable partitions to be placed around work area - Safety glasses to be worn - Other persons inside work area must wear similar eye protection	1	3	L	No
2	Slip hazard	EAP Operatives - bruises and fractures	2	3	M	- The work area be free of obstructions. - Ground to be checked for any grease or liquid spills. - Safety footwear to be worn and care taken to prevent slips and trips. - Work area to be clear of any obstructions which will/might cause interruptions to welding operation. - Any other work participants to follow same requirements	1	3	L	No
3	Burns injuries	EAP, CPV, OT, GP Operatives, other workers, sub-contractors, visitors, general public - serious impact injuries, burns possibly leading to death.	2	3	H	- Gloves to be worn to prevent burns to hands and lower arm. - Long sleeve flame retardant clothing is to be worn when carrying this work activity. - Burning/cutting material/equipment are to be allowed to cool down before handling. - Any other work participants to follow same requirements. - Burns kits are to be available and first aiders aware of the location they are stored in.	1	2	L	No
4	Noxious Fumes or flames	EAP, CPV, OT, GP Operator, other workers, sub-contractors - respiratory illness / occupational disease possibly leading to death	2	2	M	- Operator to ensure that work pieces are to be free of any oils or other flammable materials before welding occurs. - No flammable materials or liquids are to be near the cutting operation. - Gas hoses are to be checked for any damage before starting the works. - DO NOT USE IF ANY SUSPICIOUS DAMAGE IS EVIDENT.	1	1	L	No

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What are the hazards identified		Who might be harmed and how	Un-mitigated risk			What Control / Protection measures are already in place.	Mitigated risk			Any Further Action Yes / No
			L	S	R		L	S	R	
4	Noxious Fumes or flames	EAP, CPV, OT, GP Operator, other workers, sub-contractors - respiratory illness / occupational disease possibly leading to death	2	2	M	- ENSURE FLINT LIGHTER IS READY TO USE PRIOR TO TURNING ON GAS. - TURN ON ACETYLENE GAS FIRST AND LIGHT IT BEFORE TURNING OXYGEN ON (refer to operating instructions). - Gas hoses to be well clear of cutting or shoot material (splatter) at all times. - Ensure the area been worked has good ventilation. - ENSURE CUTTING TORCH VALVES AND GAS REGULATORS ARE CORRECTLY CLOSED WHEN CUTTING COMPLETED.	1	1	L	No
5	Unintentional Fire	EAP, CPV, OT, GP Operator, other workers, sub-contractors - respiratory illness / occupational disease possibly leading to death	2	3	H	- Good housekeeping is to be maintained on the site at all times. - No flammable liquids/materials are to be present in the area the cutting work activity is to commence. - No hot works are to be carried out within a minimum of an hour before the end of the working day; the area is to be visually checked for any smouldering material or signs of fire. - The relevant fire extinguishers are to be available and all operatives aware of where they are located. - Hot works permit is to be issued and managed by the Principal Contractor	1	1	L	No

Hazards/ Risk identified	Persons or Environment at Risk	Unmitigated risk			Control/Protection Measures	Mitigated risk			Name of person controlling the risk
		L	S	R		L	S	R	
Injury due to slips, trips, and falls	Operatives	3	2	High	Ensure good housekeeping practices are maintained so works area and passenger access routes are kept clear and tidy. Escalator upper landing and pit to be protected by means barriers/hoardings. <i>Access between floor levels NOT to be carried out by climbing the exposed step band bars.</i>	1	2	Low	Site Supervisor

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Hazards/ Risk identified	Persons or Environment at Risk	Unmitigated risk			Control/Protection Measures	Mitigated risk			Name of person controlling the risk
		L	S	R		L	S	R	
High Voltage shock	Operatives	3	3	High	All incoming 415v and 240v supply to be isolated at source by mains contractor and checked by site management prior to commencing final works.	1	3	Low	Lift Services Site Manager
Low Voltage electric shock	Operatives	2	3	Med	All tools to run on 110v power supply. Leads, plugs and tools to be checked daily before use. Leads kept where they can't be damaged. Any defective items removed from site. All plant to be PAT tested and certified.	1	3	Low	Lift Services Site Manager
Misuse of equipment causing injury to operator	Operatives	2	2	Low	Only trained and competent operatives to utilize tools. Maintenance of tools in accordance with manufacturer's instructions.	1	2	Low	Lift Services Site Manager
Musculoskeletal injury due to manual handling	Operatives	3	2	Med	Mechanical means used wherever possible. Mechanical lifting equipment used for unloaded and maneuvering of equipment. Lifting within individual's capability. Multiple persons lift if load exceeds 20Kgs. Adequate rest between lifts.	1	2	Low	Lift Services Site Manager
Pallet trucks and trolleys transport through the site	Operatives Public	3	1	Low	Transportation of materials and equipment to and from working site only to be performed in agreement with the Lift Services site manager,	1	1	Low	Lift Services Site Manager
Tracking escalator sections through the site	Operatives Public	3	1	Low	Transportation of materials and equipment to and from working site only to be performed in agreement with the Lift Services site manager	1	1	Low	Lift Services Site Manager
Loading/unloading of materials	Operatives	2	2	Med	The site team to be made aware of the proposed delivery dates and times. All site operatives to wear task specific PPE. Operators of plant to be	1	2	Low	Lift Services

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Hazards/ Risk identified	Persons or Environment at Risk	Unmitigated risk			Control/Protection Measures	Mitigated risk			Name of person controlling the risk
		L	S	R		L	S	R	
from delivery and removal vehicles.	Public				trained and competent. Sufficient numbers of operatives to ensure working areas are kept clear whilst lifting operations are undertaken. Clear line of site and communication between Hiab operator and other personnel is maintained.				Site Manager
Lifting escalator from existing seatings.	Operatives Site staff	2	3	High	All site operatives to wear task specific PPE. Operators of plant and equipment to be trained and competent. Sufficient numbers of operatives to ensure working areas is kept clear whilst lifting operations are undertaken. All other trades to be excluded from the working site during lifting operations.	1	3	Low	Lift Services Site Manager
Weils disease	Operatives	2	2	Med	Gloves to be always worn. Wash hands before eating, drinking, or smoking (No smoking allowed on site and no eating allowed on site). Cover breaks in skins with waterproof plaster/bandage. Staff to get toolbox talks on Leptospirosis.	1	2	Low	Lift Services Site Manager
Poor visibility	Operatives	3	2	High	Use temporary portable lighting if necessary.	1	2	Low	Lift Services Site Manager
Unauthorized access	Public	2	2	Med	Traffic management in place for unloading, barriers/hoarding in place around work site.	1	2	Low	Lift Services Site Manager
Crushing	Operatives	2	2	Med	All operatives to be trained and component, engineers hand controller to be used at all times when running escalator. Clear communication between engineers when running escalator. When escalator is not being run the step band locking device is to be engaged.	1	2	Low	Lift Services Site Manager

LIFT SERVICES

Hazards/ Risk identified	Persons or Environment at Risk	Unmitigated risk			Control/Protection Measures	Mitigated risk			Name of person controlling the risk	
		L	S	R		L	S	R		
Likelihood 1 = Unlikely 2 = Possible 3 = Likely	Severity 1 = Minor injury, minor environmental 2 = Major injury, significant environmental event 3 = Fatality, major environmental event				Risk = Likelihood x Severity Low (Green) = 1 or 2 Medium (Blue) = 3 or 4 High (Red) = 6 or 9	Likelihood 3 2 1				
Final check to be carried out at work commencement by engineering site supervisor.										
The operations covered by this risk assessment have been checked given the following status:										
A		Accepted for operations to continue								
B		Comments made and incorporated into the task briefings. Operations may proceed								
C		Revised WPP required for acceptance. Operations to cease								
Name:					Signature:			Date:		

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