

## ***Emergency Preparedness Plan***

# ***ITW* Performance Polymers**

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## 1.0 Introduction

The following Emergency Preparedness Plan is the emergency control standard designed for ITW Performance Polymers. The objective is to comply with our legal requirements and provide a controlled response to all on site emergency situations. This objective can be achieved providing we use and control the resources available to us from both internal and external services.

Our objectives are:

- The effective safe evacuation of all employees, contractors, and visitors
- The effective treatment of any casualties
- Minimise damage to our property and the environment
- Initially contain and ultimately bring the incident under control
- Preserve relevant records of the incident for the enquiry into the cause and circumstance of the emergency

This can be achieved by being prepared before and during the emergency. The steps in emergency preparedness are as follows:

1. Total management commitment
2. Assignment of responsibility and accountability
3. Maintenance of safe operating conditions during the emergency
4. Investigate and report all incidents which could lead to an emergency
5. Emergency preparedness for all situations
6. Personal responsibility and accountability

It will be necessary to organise permanent personnel via a hierarchical emergency organisation structure to evacuate, visitors, contractors and employees from the premises safely and undertake any other emergency actions deemed appropriate. This team is known as the Emergency Response Team.

The ERT is based on permanent personnel and is organised on a team structure.

Every employee is responsible for reporting any potential emergency on site. The employee raises the alarm by activating one of the break glass units located at all exits on-site.

The ERT Leader and Action Members congregate at the Production Office. If an emergency is confirmed the ERP is activated in response to the identified emergency.

## 1.1 When should the alarm be activated

It should be pressed by anyone in the building given any of the following circumstances:

- There is a fire of any size
- There is a known hazard, which may cause harm to others or yourself
- An accident occurs involving chemical(s) release or potential release
- An accident occurs and the health hazards or potential health hazards are unknown
- Whenever an uncontrolled physical hazard exists such as exposed live wires or 'lost integrity' of building structure
- **If still in doubt activate the alarm**

## 1.2 How do I activate the alarm?

The evacuation alarm is activated by breaking one of the break glass units located at all exits.

- When the emergency alarm sounds the burglar alarm is initiated. This results in a signal being sent to the Top Security (Security Company) in Dublin informing them there is an emergency
- Top Security will then telephone us to investigate the situation

## 1.3 Reporting Out of Office Hours

If Top Security receives a signal from the emergency alarm outside of working hours, they contact Group 4 Security in Shannon who then comes on-site to investigate the cause of the alarm being set off. As per their investigation Group 4 will contact one of key-holders or the Gardaí or the Emergency Services to the factory.

### 1.3.1 Alarm Activation during overtime hours

If the alarm sounds during overtime hours all personnel who are on site must evacuate the building and follow instructions from ERT or their supervisor/Shift Lead.

## 1.4 Evacuation Procedure

In the event of an emergency evacuation, the following actions should take place:

- All personnel, except those who have been assigned specific duties, should proceed to the nearest fire exit immediately upon hearing the alarm
- If you notice any employee not exiting the building calmly inform them to leave do not shout at them as this may cause panic
- Assemble at the assembly point in the front car park
- Make one-self known to personnel responsible for roll call

- Should you be the person who activated the fire alarm, make yourself and the reasons known to the roll-call personnel
- Do not re-enter the building until the all clear is given

**Note:** In the event of an emergency, visitors to our facility are the responsibility of the employee they are visiting. Make sure your visitor(s) leave the building and have them included on the Roll Call in the front carpark.

## 1.5 Incident Control

The ERT or Shift Lead, lead the action to request medical treatment, spill control, or requesting support from external emergency services such as Fire Brigade, Ambulance etc.

In the event of an emergency evacuation, the emergency response team should assemble at the emergency response room (Production office).

**Note:** If the emergency response room is the location of the fire, the team should then proceed to the front car park entrance and decide on further action.

ERT or Shift Lead must note the following for the emergency services:

- Zone where the alarm is sounding (taken from switchboard in Production Office)
- The Team Leader will find out from the roll call personnel
  - o Why the alarm was set off
  - o If all personnel have been accounted for
- Provide a floor map to the emergency services
- Have a list of chemicals on site

## 1.6 Return to Service

When the incident has been closed out, employees return to work.

- Once the incident has been declared over, the all clear signal will be given by the Plant Manager during day and shift work
- If it is safe and possible for people to return to work, then all people return to their positions
- Any damage to the site will be assessed by the Plant Manager and appropriate clean-up/repair operations completed. External resources may need to be utilised to assist with the clean-up (e.g. contractors, fire brigade etc)
- If it is not safe to return for people, then the site should be completely evacuated until such time as it is safe.

## 2.0 Emergency Response Plan

The Emergency Response Plan (ERP) is divided into four phases:

### 1. Reporting

Every employee is responsible for reporting any potential emergency on site. The employee raises the alarm by activating one of the break glass units located at all exits on-site. If the employee is in any doubt, they must activate the break glass unit. The ERT meet at the Production Office. If an emergency is confirmed the ERP is activated in response to the identified emergency.

### 2. Emergency Shutdown / Evacuation

The area, which is affected, performs emergency shutdown and evacuation according to the ERP. The following personnel will be required only if it is safe to do so, to shut down all operating equipment in their respective departments before evacuating:

- Formulators - Mixers
- Production Operators and Assistants - Filling machines
- Lab Technicians - Ventilation, Viscometers, Tensometer
- Maintenance personnel - Drills, Grinders, Saws

### 3. Incident Containment / Control

The ERT or Shift Lead, leads the action to control/eliminate the hazards, i.e., medical treatment, spill control, or requesting support from external emergency services such as Public Fire Brigade, Ambulance etc. There is a first aid kit and eye wash kit located in the reception area to be collected by a first aider on exiting the building.

### 4. Return to Service

When the incident has been closed out, employees return to the area to resume work. Once instructed to do so by the plant manager or operations director on both day and shift work

## 3.0 Emergency Response Team Structure and Duties

The Emergency Organisation is based on permanent personnel and is organised on a team structure. In the event of any persons on the ERT team being missing from the site, nominated deputies should automatically act for the person they are deputising for. It is the responsibility of each team member to check in on the production office notice board each morning and to check out each day. It is the responsibility of the substitute to know if their team member is in each day. Gathering in the Production Office when alarm sounds the ERT can be told the

reason as to the sounding of the alarm. That is if a member of ERT has set it off or a member of staff has done so. This will lead to prompt action to be taken by the ERT.

Duty	Team Member	Substitutes	Substitutes (2)	Shift Members
Team Leader (Call emergency services and direction to ERT members)	John Sullivan	Werner Hefer	Mark Munnelly	Don, Greg, Alex and Dylan, Peter Fox
Action Member (water valve)	Fintan Ginnane	Michael Mooney	Kieran Pearl	Don, Greg, Alex and Dylan, Peter Fox
Action Member (Reset gas)	Sean Wren	Kieran Casey	Kevin Byrnes	Don, Greg, Alex and Dylan, Peter Fox
Action Member (Reset Alarm)	Sean Wren	Kieran Casey	Kevin Byrnes	Don, Greg, Alex and Dylan, Peter Fox
Action Member (Vents)	Sean Wren	Kieran Casey	Kevin Byrnes	Don, Greg, Alex and Dylan, Peter Fox
Action Member (Reset sprinklers)	Sean Wren	Kieran Casey	Kevin Byrnes	Don, Greg, Alex and Dylan, Peter Fox
Action Member (First Aid)	Sinead Burke, Peter Fox, Sean Wren and Kevin Byrnes – First aid kit to in reception and brought outside once alarm goes off			Don, Greg, Alex and Dylan, Peter Fox
Roll Call Personnel/Chemical Folder	Nicole Moloney	John Sullivan	Mark Munnelly Claire O'Rourke	Team Leader

Lock Back Gate	Brian Mullins	Mark Vincent	Ollie Gray Kevin Ginnane	Don, Greg, Alex and Dylan, Peter Fox
Fire Wardens	Mark Munnely, Bryan Williams, Brian Mullins, Claire O'Rourke			
Contractor Book & Emergency services folder	Nicole Moloney, John Sullivan, Mark Munnely or Claire O'Rourke			

Table 1: Emergency Response Team Structure

### 3.1 Team Leader Duties

- Be familiar with the facilities and all hazards associated with the operations carried out throughout the premises.
- Ensure that all Emergency Response Team Members and others who have a duty under the Emergency Response Procedures are fully aware of their responsibilities.
- The Emergency Response Team Leader is responsible for directing the actions of the action members.
- The Team Leader will decide if it is safe for the Actions members to proceed to deal with the emergency.
- The Team leader will deal with any media enquires relating to the emergency scenario.
- He shall be responsible for notifying the external Emergency Services if an emergency is discovered by investigating ER Team Members or Shift Lead and liaise with same when they arrive on site.
- Report to the Evacuation Personnel when it is safe for employees to re-enter the premises.

#### 3.1.1 Sprinkler Control Valve Operator

- Once all personnel have been accounted for at the assembly point for roll call, the sprinkler control valve operator will check the Boiler House to ensure that the pump had been activated and the system is running. Entry to the pump house is only permitted if it is safe to do so. See Spec no. H&S34 for procedure on sprinkler system.
- ***In the event that nominated sprinkler valve operator is off site or during Shift hours when alarm is raised, Emergency Services will take responsibility for this action. This has been determined based on their***

***close proximity, technical experience and prompt response time. Information for this is at hand in reception.***

### **3.2 Action Members Duties**

- Be familiar with the contents of the Emergency Response Plans.
- Upon hearing the activated fire alarm report to the Production Office immediately.
- It is the responsibility of the Action members to report back any information to the Team Leader so that necessary action can be taken. (i.e. procurement of first aider, of the Emergency Services)
- **At no point is any Action member to put themselves at risk while dealing with any emergency situation.**
- Report back to the Team Leader when the emergency situation has been eliminated.
- Report to the Regulatory Affairs Officer of any injuries to personnel, loss of life or environmental release.
- Close storm water valve after reporting to Production Office

### **3.3 Roll Call Personnel Duties**

- The Roll Caller takes the list of personnel on-site and makes their way to the assembly point.
- It is the responsibility of the roll caller to ensure that all employees have been accounted for.
- All visitors and contractors on site must be accounted for also
- Should a member of staff not be accounted for, this information must be reported to the Emergency Response Team Leader as soon as possible. If known communicate their last known location.
- Liaise with the Team Leader to organise the movement of people from the assembly point should this become necessary.

### **3.4 Regulatory Affairs Officer/Team Leader Duties**

The ERP should be activated where necessary in responding to incidents. As part of the ERP the Regulatory Affairs Officer/Team Leader is required to ensure that at a minimum the following action is taken:

- Contact the Emergency Response Agencies and the Environmental Protection Agency to communicate the incident details.
- Be available to take calls regarding the incident.
- Keep apprised of the on-going situation in order to determine the appropriate level of response from staff.
- Provide and support the technical response to the incident.
- Ensure that suitable safety precautions are in place regarding any on-site response.

- Provide and support the monitoring and analytical response.
- Advise on notification to the public and other Agencies.
- Advise on remedial action necessary including preventative action i.e. potable water supplies
- Ensure compliance with the incident notification conditions of the licence
- When reporting incidents to the EPA a set template must be used this can be found in Appendix 6

### **3.5 Storm Water Valve Operators**

The storm water valve is located at the front of the building. Once all ERT have assembled in Production Office the duty of closing the storm water valve rests with the following personnel:

Action Member: Fintan Ginnane/Shift Employee during shift hours  
Substitute: Michael Mooney  
Kieran Pearl

This will prevent any environmental contamination of local water supply. The valve will be closed whether the evacuation is due to fire, chemical spill or other environmental issue. The instruments required for this task are located at the TMS system at the back of the building.

## **4.0 Emergency Services**

All three of the Emergency Services would be involved in a major emergency:

### **4.1 Ennis/Shannon Fire Brigade**

When the requirement for Fire Brigade is necessary as determined by investigating ERT members, the Team Leader will contact the Fire Brigade immediately by dialling 999 and asking for Fire Brigade Service.

Once the Chief Fire Officer arrives on site the Team Leader will hand over control of the incident, describe the situation and provide whatever support may be required.

Priority would be given to locating missing persons. On-site First Aiders will tend to casualties.

### **4.2 Ambulance & Hospital Services**

When the requirement for ambulances/hospital services has been determined, the Team Leader will **dial 999** (or 112) and ask for

AMBULANCE CONTROL, and then describe the nature of the incident, the number of casualties and the range of injuries. The team leader is instructed not hang up the phone until asked to, when obtaining ambulance control.

On arrival of the Ambulance(s) the company First Aiders will liaise with the Ambulance /Hospital Staff and identify Medical Priorities. The First ambulance on site will assess situation and radio for more help if required. The Company First aid team will work with the Ambulance/Hospital Staff.

The First Aid Team will ensure that sufficient medical supplies etc are always available for a Major Emergency. Please see table 2 for first aid members.

Team Member	Contact Details
Sinead Burke	061 771525
Sean Wren	-
Peter Fox	-
All Shift workers	-

### 4.3 Gardaí

When an emergency call is made and an ambulance is requested, details are usually passed on to the local Gardaí. However, as a backup, the Team Leader will dial or delegate person to 999 and ask for 'GARDAI'. Nature of incident will be described, and Garda support requested to control traffic on the access road to the industrial estate to prevent delays to ambulances and danger to pedestrians in the area of the plant.

The Team Leader will liaise with the Gardaí when they arrive on site, describe the situation to them and provide whatever information they may require concerning the plant and site.

## 5.0 Emergency Events/Situations

### 5.1 Reactor Alarm Response

- **THE REACTOR IS NOT TO BE USED DURING SHIFT HOURS**
- The reactor during normal everyday use reaches a pressure of 1 bar
- The reactor alarm will sound if the reactor is forced to a pressure level of 1.5 bars
- Once the reactor goes above the pressure point of 1.7 bars, a bursting device releases the increased pressure

### 5.1.1 Emergency Response Team Action

- The reactor alarm is sounded after the reactor reaches a pressure of 1.5 bar. If it is safe to do so a formulator (competent) opens the pressure relief valve.
- If, however, the pressure reaches 1.7 bars, the operator hits the break glass unit to raise the alarm. The area is to be evacuated immediately
- If the pressure continues to rise above 1.7 bar the Emergency Response Team leave the area and ensure that all the necessary emergency services have been notified.
- Upon arrival of the emergency services, the emergency response team will supply necessary information to the emergency services, which will then take charge of the emergency situation.

## 5.2 Fire

- Emergency Services should be contacted
- If a person's clothing is on fire, wrap a fire blanket, rug or similar article, closely around them and lay them on the ground to prevent the flames from reaching their head
- Be sure to protect your face with your hands. **DO NOT** cover your face with your hands if shirtsleeves or upper body have caught fire as it can bring flames to your face
- **NEVER** run if you are on fire. This will only fan the flames and increase the fire.
- Water fire hose reels and fire hoses are only to be used against fires consisting of paper, textiles, wood, rubber and cardboard
- All surrounding containers should be cooled with water to prevent containers from rupturing.
- If electrical appliances are involved, switch off the current before dealing with the fire, if safe to do so. **NEVER** use water on electrically started fires
- Shut all the doors in the room in which the fire has been discovered
- ***Never attempt to fight a fire if your back is not to an exit***
- Upon arrival of the Fire Department, inform the fire department members of all possible risks, equipment, chemicals stored on-site
- All firewater should be contained on-site, and an external contractor employed for its disposal
- Once the fire alarm is activated, the ceiling vents will automatically open, the action member, shift lead, or Employee must close these once the incident has been declared over. These vents are located in the reception area and in the server room in finance.

### 5.2.1 Emergency Response Team Action

- Access to the site should be closed off.

- Ensure personnel are evacuated safely.
- Arrange that no vehicles to be allowed on-site, except emergency vehicl

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Ensure that first aiders are available to treat any casualties. If an employee has been injured by a drum projectile do not attempt to remove it if it is embedded. The storm drain valve should be turned off.

### **5.2.2 Fire in Chemical Storage Area/ Formulation/ Plexus Areas**

Three outdoor chemical storage areas are located on site. All storage areas are bunded to contain spillages and have signs erected indicating the chemical class stored. Rocketing or flying drums have been reported in fires in several facilities that store liquids in drums and other containers. A drum projectile could injure ITW personnel or rupture/damage surrounding waste storage containers causing fire/further explosion. Both the Plexus and formulation areas are zoned 2 areas due to the presence of flammable vapours in these areas.

**If a fire breaks out in any of these areas, the entire premises is to be evacuated and the emergency services called.**

#### **5.2.2.1 Emergency Response Team Action**

- Access to the site should be closed off.
- Ensure personnel are evacuated safely.
- Arrange that no vehicles to be allowed on-site, except emergency vehicles.
- Ensure that first aiders are available to treat any casualties. If an employee has been injured by a drum projectile do not attempt to remove it if it is embedded.
  - Arrange for the surface water valve to be shut.
- Control of the incident is to be handed over to the emergency services upon their arrival on-site.
- The Regulatory Affairs Officer will inform relevant regulatory agencies, if any of the spilled material has exited the site or has the potential to cause environmental damage.

## **5.3 Hazardous Material Spills**

### **5.3.1 Personal Spills**

Whenever a chemical is splashed or spilled onto the skin, the affected area should be washed immediately with copious amounts of soap and water to assure removal of contamination from skin folds and beneath fingernails and toenails.

- If overalls are wetted to a sufficient extent to soak through to the skin, the overalls should be removed and disposed of.

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- If a material is splashed/spilled into the eyes. The eyes should be flushed in an eye bath for at least 15 minutes, gently holding the eyelid away from the eye for thorough flushing.
- A first aider should always be contacted when a person is splashed with a chemical.
- The production supervisor or Shift Lead should be notified of any personnel spill.  
A doctor should be contacted for any spill/splashes of liquid chemical to the eyes.  
An accident report will be completed for all personal spills and reported to the Health & Safety Authority as required (i.e. victim is out of work for >3 days)
- **Aliphatic amine epoxy hardener components and isocyanate-based chemicals can cause skin and eye burns if not promptly removed.**

### 5.3.2 Solid Chemical Spills Clean Up

- Correct PPE is to be donned
- Any solid chemical spill should be swept up thoroughly and placed in a closed, marked container
- The area supervisor or Shift Lead should be informed of any solid spills
- The Regulatory Affairs Officer or Shift Lead should be informed of the spill and a report completed

### 5.3.3 Liquid Chemical Spills Clean Up

- Spills of liquid chemical, excluding pre-polymers, isocyanates and mixed materials
- If a spill occurs, less than 50L, organic respiratory masks should be worn and ventilation switched on
- If a spill occurs, greater than 50Litres all available ventilation should be switched on and the area should be evacuated until fresh air masks can be obtained
- PPE must be worn
- An excessive amount of absorbing material should be spread over the spill and should be allowed to soak up most of the liquid
- This material should be swept up and disposed of in (including the sweeping instrument) a labelled, sealed container, according to the waste stream involved

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- If a spilled material contains a flammable solvent or material, a fire extinguisher must always be kept to hand
- This should be marked as “Extremely hazardous” until the area is completely dry
- The Regulatory Affairs Officer should be informed of the spill and a report completed and spill kit restocked

#### **5.3.4 Small liquid spill of pre-polymer or pure isocyanate (less than 1 litre)**

- An organic cartridge mask should be put on immediately following a small prepolymer spill and all ventilation switched on. In areas of poor or no ventilation a fresh air mask should be worn.
- The Production Manager or Shift Lead should be notified of the small spill.
- The spill should be immediately covered with absorbing agent, scraped up, and transferred into an isocyanate hazardous waste drum.  
The spill area should be mopped up with the isocyanate neutralisation solution and marked, as “Hazardous Area” until the floor is completely dry.  
The Regulatory Affairs Officer should be informed of the spill and a report completed and restock the spill kits

#### **5.3.5 Large spill of pre-polymer or isocyanate (more than 1L)**

- If a large spill occurs, all personnel should immediately evacuate the area. The production co-ordinator should be notified immediately if the spill is more than 1litre of pure isocyanate.
- The area should be covered with absorbent material, swept up and removed from the area.
- The isocyanate neutralisation solution should be applied to the spill area and the area should be marked, as “hazardous” until it is completely dry.
- The swept-up material should be marked, as “Hazardous Waste” with no further decontamination until the Safety Manager/Environmental Officer is notified.

#### **5.3.6 Preparation of Isocyanate Neutralising Solution**

- There is a white can beside the reactor platform with a prepared solution of Isocyanate neutralising solution, however if more is required follow the below directions;

- Tap Water                    14L
- Isopropanol                    5L
- Household Ammonia            2.5L

- 
- - Detergent 1L

Always Wear personal protective equipment.

Add all ingredients into a plastic 25L drum in the order listed above. Shake until the detergent is dissolved.

#### **5.4 Hazardous Material Storage (Outside)**

On site there are several locations outside where hazardous materials are stored. These include the following:

- Bulk Epoxy Resin Storage Tanks
- 4 x Sheds containing hazardous materials

During Shift work hours the back yard should not be accessed, all materials needed should be received before normal working hours have been completed.

All hazardous materials will be separated according to physical properties and stored safely in storage areas appropriate to the risk posed by the materials. Proper storage of chemicals is imperative to eliminate the chance of mixing of incompatible substances. Follow the guidelines listed below and group

chemicals according to chemical classification to increase the level of safety in the work area.

#### **5.4.1 Chemical Spill in back yard**

- Depending on the chemical type and quantity spilled all personnel excluding the Emergency Response Team will evacuate the building.
- A member of the emergency response team must go and shut off the surface water drain, while the other action member seals all the surrounding drains with plug rugs provided in the spill kit, or the lockable drain covers held in the boiler room.
- A member of staff will be stationed at the back entrance to warn all incoming traffic.
- All action of forklift trucks, haulier trucks will be ceased immediately.
- A spill kit is located in the backyard at the Toxic and Corrosive Shed and by the compactor
- Fire extinguishers should be on standby in case spilled material is flammable.
- Magicsorb should be spread in excess over the chemical spill and allowed to soak.
- If it is thought that any chemical has entered the surface water system, the Regulatory Affairs Officer must be informed immediately.
- The Regulatory Affairs Officer will then contact the EPA and Clare County Council, giving information on the chemical type, environmental classification, quantity spilled, and the corrective actions been put in place.
- An external waste management contractor will dispose of any surface water collected after the surface water drain has been closed.
- Spent Magicsorb will then be swept up and collected into suitable disposable containers, which will be labelled appropriately.
- The Warehouse Manager will arrange to have the spent absorbent disposed of in accordance with ENV3 *Waste Management at ITW Shannon*.
- A detailed report will be compiled of the chemical spill and retained on-site.

Reporting procedure to the Environmental Protection Agency, Fisheries Board and Local Authority is located at the end of this document; this will have to be done in the event of an environmental catastrophe.

### **5.5 Bomb Threat & Suspicious Package**

#### **5.5.1 Receipt of Threat by telephone**

Write down the information (word for word) as it is received. A copy of this should subsequently be sent with an incident report to the contacts above. Report the threat promptly to the Bomb Security Leader. During Shift hours contact the plant manager or operations director

#### **5.5.2 Suspicious Package**

If any employee, visitor or contractor on site finds a suspicious package they should report it at once to the Regulatory Affairs Officer and/or Plant Manager. They in turn should report it promptly to the Gardaí. Under no circumstances

should the package be touched or moved until the threat has been fully assessed by the Gardaí.

### 5.5.3 Emergency Response Action

- Evacuate the entire premises
- Unless no action is considered appropriate, the Gardaí should be contacted at once  
Shannon Garda Station 061-361212
- The fire brigade (Telephone 999) should be summoned and told we have a Bomb threat
- People should be warned to remain as far away from the building (especially the windows) as possible
- Roll calls are to be carried out as normal to ensure that the plant has been fully evacuated.
- If the evacuation is likely to last for some considerable time, and particularly if the weather is poor, plans should be considered to move employees to suitable off-site accommodation
- Search should only be conducted by the Gardaí

**At all times during a bomb threat, the safety of all employees and other people working on or around the site is absolutely paramount. No unnecessary risks must be taken.**

Since most telephones on site have direct dial access from external lines there is potential that any telephone users could receive a threat. In the event of receiving bomb threats by telephone try to get the following information as a minimum:

1. The location of the device
2. The time of detonation
3. The reason for planting the device
4. Any background noise/distinguishing features

### 5.6 Explosion

In the event that there is an explosion on site, the site is to be evacuated immediately. The emergency services are to be contacted and roll call to take place so that when they arrive on site they can be notified if any personnel are missing. An explosion can occur from any one of the following activities, but it is not limited to just these:

- Reactor & adverse chemical reaction
- Epoxy resin storage tanks rupturing
- Gas

## 5.7 Overcome by Fumes

As there are a wide range of chemicals used and stored on site. There is a risk of persons being overcome by fumes which may initially lead to unconsciousness and even death.

Persons may be overcome by fumes when:

- Cleaning pots used in the manufacture of products
- Fumes escaping from barrels and containers that have not been sealed securely
- Not wearing the correct RPE when opening barrels and mixing products
- Ventilation is not working correctly or turned on

### 5.7.1 Emergency Response Team Action

- The Team Leader will contact the Emergency Services
- Upon arrival of the emergency services, inform the fire department members of all possible risks, equipment, chemicals stored on-site

## 5.8 MMA Room

In the event that there is a system failure in this room, the site is to be evacuated immediately. The emergency services are to be contacted and roll call to take place so that when they arrive on site they can be notified if any personnel are missing. An explosion can occur from any one of the following activities, but it is not limited to just these:

- Polymerisation reaction
- Chemical reaction either due to incorrect procedure being followed
- Temperature control failure in room and in Organic Peroxide storage
- Contamination of drums such as filling adhesive into activator drums and vice versa
- System failure in mechanical equipment

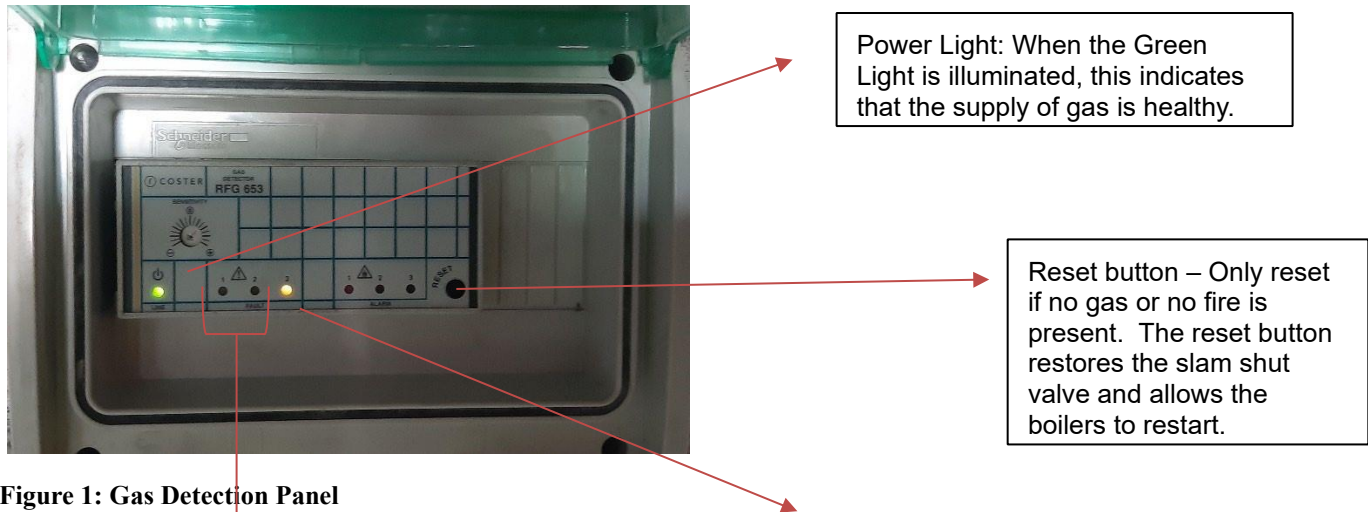
### 5.8.1 Disabling the MMA room fire panel once the emergency situation has been controlled and it is safe to return to the building.



1. Enter code 13442
2. Press button 2 once – the general disablement indicator will illuminate – the general disablement indicator will then flash showing the option has been accepted.
3. Press button 2 until the required zone is highlighted (Zone 1 M-M-A Room)
4. Press button 1 to show that the zone is disabled/not disabled.
5. Press 3 to return to the selection menu.
6. Press 4 to accept and program the disablement set-up and return to access level 2
7. The yellow general Disablement indicator will be illuminated steady, as will the row 2 disablement indicator for the relevant zone

## 5.9 Gas Leak/Alarm

In the event of a gas leak, the slam shut valve will be activated and in turn will activate the fire alarm system throughout the site. When the fire alarm is activated evacuate the building immediately. The Gas Panel is located in the boiler room on the left-hand side as you enter the room from manufacturing as shown below in Figure 1



Power Light: When the Green Light is illuminated, this indicates that the supply of gas is healthy.

Reset button – Only reset if no gas or no fire is present. The reset button restores the slam shut valve and allows the boilers to restart.

Figure 1: Gas Detection Panel

Fault lights: Light 1 and 2 will be illuminated red if there is a gas detection. Red LED's will be extinguished once there is a healthy supply.

Fault Lights: Light 3 will illuminate all the time to register healthy supply.

### 5.9.1 Emergency Response Team Action

- Evacuate the entire premises
- Conduct a role call to ensure all personnel have evacuated the building
- The gas detectors will activate a slam shut valve isolating the mains gas
- The gas line has a manual override shut off valve outside the boiler room for fire brigade, if needed as seen in figure 2
- The team leader or Shift lead will contact the appropriate emergency services and the Gas provider



Manual shut off point, this must always be kept clear for easy access.

Figure 2 Manual Gas shut off

### 5.9.2 Checklist for Reactivation of Gas

- The fire alarm must be reset before reactivation of the gas
- The alarm should never be silenced until the cause of the alarm has been identified and it is deemed safe to do so.
- See Figure 3 for fire alarm panel and step by step guide for silencing and re-setting the fire alarm panel.

- When fire alarm is reset, then reset the gas panel. See Figure 1, Press the reset button on the gas panel. Note: at this point the gas panel red LED should extinguish. If not, then wait a few minutes for gas to clear from gas sensor & reset the gas panel.

This final reset restores the slam shut valve and allows the boilers to restart.

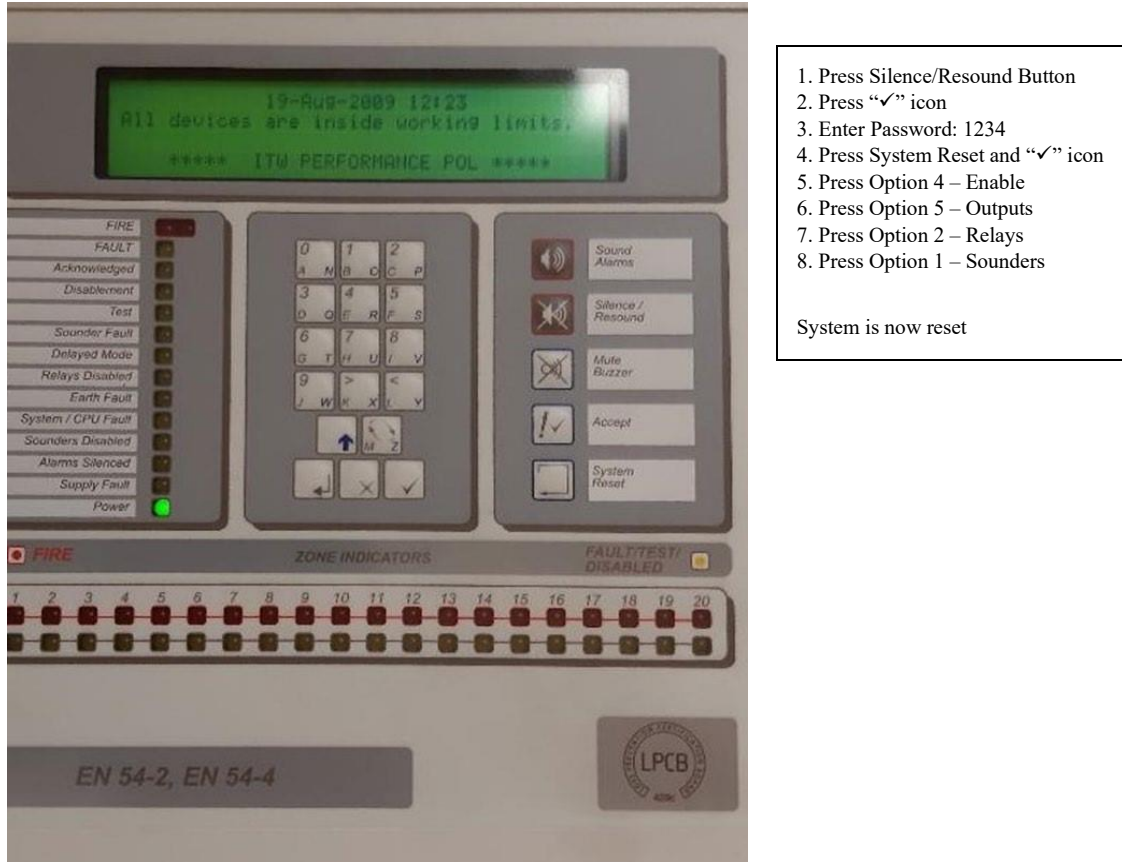


Figure 3: Fire Alarm Panel

1. Press Silence/Resound Button
2. Press “✓” icon
3. Enter Password: 1234
4. Press System Reset and “✓” icon
5. Press Option 4 – Enable
6. Press Option 5 – Outputs
7. Press Option 2 – Relays
8. Press Option 1 – Sounders

System is now reset

## 6.0 Prevention Plans

### 6.1 Flood Protection Plan

ITW Performance Polymers Ltd is located in the Shannon Industrial Estate. The risk of a flood at the plant is relatively low. A potential flood could occur if a high spring tide in the Shannon Estuary coincided with a strong storm wind of a south or southwest direction off the Atlantic Ocean. Operations will inform Shift personnel of any risk of flooding prior to the commencement of shift work.

1. Upon alert of a possible flood situation the Regulatory Affairs Officer will contact the Shannon Foynes Port Company
2. Upon information received, the Plant Manager will determine if a staff evacuation is necessary. An announcement will be made over the plant intercom to alert employees to evacuate. All staff must be accounted for prior to anyone leaving the plant’s assembly point.
3. In the event of an evacuation, the Plant Manager will designate employees to carry out flood mitigating measures.

4. The Regulatory Affairs Officer will contact the Shannon Foynes Port Company at regular intervals to provide the emergency response team with details of the flooding.

### **6.1.1 Damage Limitation Measures**

- All chemical drums stored in the back yard are to be relocated to the Drum storage sheds or if required into the main warehouse. The doors on the drum storage areas are to be secured to ensure that they remain closed at all times.
- The back gate to the facility is to be locked. A plywood barrier is to be secured to the gate. Two rows of sandbags are to be laid in parallel to the expected flow of water.
- All chemical drums in the warehouse are to be put up on the racking provided.
- Any equipment that can be moved is to be moved to the second floor of the plant.
- All other fixed equipment is to be wrapped in heavy plastic sheeting to minimise water damage.
- All manholes on-site are to be weighed down with sandbags to ensure that the manhole lids remain in place.
- All sink units are to have their stoppers in place and a sandbag laid in the unit.
- All toilet lids are to be put down and a sandbag laid on each.
- The flow valves on the oil tank and all gas cylinders are to be turned off.
- All doors are to be shut and sandbags to be placed in front of them to deter water. A plastic sheet is to be placed under the sandbags to help make them more waterproof. Doorways are to be sealed with silicone sealant if deemed necessary.
- Prior to leaving the plant all electricity, gas and water supplies are to be turned off at the mains.

### **6.1.2 Post Flooding**

- A thorough examination is to be carried out to assess the safety of the plant prior to employees returning to work.
- No equipment is to be switched on unless authorised by the Engineering Coordinator/ Electrician.
- The plant security system is inspected and put back in service as soon as possible.
- Our sister companies will be notified to arrange for business to continue as far as practicable.

## **6.2 Fire Prevention Plan**

This section of the emergency response plan concerns the strategy of ITW Performance Polymers to reduce, control, and eliminate the potential injury and damages to personnel and property by reducing the probability of a fire. This goal is to be accomplished by investigating the following:

- Identify and establish controls for fire hazards.
- Perform proper installation, operation, and maintenance of process equipment.
- Maintain good housekeeping practices with respect to all flammable and combustible materials.
- Train employees in proper handling of equipment and chemicals.

## **6.2.1 Identification of fire hazards, sources of ignition and control by facility area**

### **6.2.1.1 Formulation area**

#### **Hazards**

- Use of flammable liquids (MEK, Methyl Prititol, Glycol Ether for cleaning pots, and manufacture of C155)
- Pressure build-up by the Dedidrich reactor

#### **Potential Ignition Sources**

- Static electricity, friction, electrical on/off switches, overheating

#### **Control**

- The formulation area is divided into a zoned region (zones I & II). Use of electrically operated equipment is prohibited in this region unless it is ex-rated. These include forklifts, weighing scales, drills and mobile phones etc.
- MEK (Methyl Ethyl Ketone) is stored in its original 200 litre drum.
- Installation of a bursting device and pressure gauge.
- A ventilation system exchanges air, keeping vapours below the lower explosion limit.
- Firefighting equipment is available.
- Electrical connections are intrinsically safe. Units have safety shut off mechanisms if internal temperature set points are exceeded.
- Sprinkler system (528 sprinkler units).
- Installation of a bursting Device / Safety Pressure Gauge.

### **6.2.1.2 Laboratory**

#### **Hazards**

- Use of hot plates
- Furnace
- Weighing scales

#### **Potential Ignition Sources**

- Overheating, Human error (Misuse of Chemicals), electrical on/off switches

#### **Control**

- Training personnel in the handling of chemicals
- Electrical connections are intrinsically safe
- Firefighting equipment available
- Sprinkler system (528 sprinkler units)

### **6.2.1.3 Warehouse**

#### **Hazards**

- Build-up of cardboard

- Overheating of fluorescent bulbs used for lighting
- Pressure build-up of the reactor
- Over-flow of electric current in the filling machines

**Potential Ignition Sources**

- Fork trucks, electrical on/off switches, electrical equipment (cables)

**Control**

- Electrical hand truck is available for moving pallets in/out of the warehouse
- Ventilation system exchanges air, keeping vapours below explosion limit
- Firefighting equipment is available
- Sprinkler system (528 sprinkler units)
- RCD's Residual Current Device Implementation

**6.2.1.4 Shipping Area****Hazards**

- Flammable Liquids (Products)

**Potential Ignition Sources**

- Blow torch (Open Flame), used when wrapping pallets with plastic
- Fork trucks
- Electrical on/off switches

**Control**

- UN packaging is used for hazardous materials as per shipping regulations
- Products are maintained in closed containers
- Firefighting equipment is available along with a sprinkler system

**6.2.1.5 MMA Room****Hazards**

- Flammable Liquids (Product and Chemicals)
- Organic Peroxides
- Chemical reaction and polymerisation
- Mechanical failure

**Control**

- Foam fire suppression system in place
- Electrical Invertors located outside room
- Temperature control alarm in place
- Chemical stabiliser in room (BHT) that can be used to prevent reaction going out of control
- All drums washed out with MMA prior to use to prevent any contamination

- Colour coding system in operation for all aspects of work in this room including cleaning equipment

### 6.3 Preventative Maintenance Plan

The Engineering Co-ordinator, under the authority of the Plant Manager, is responsible for the maintenance and servicing of all equipment in the facility. A Maintenance Schedule is filled in at the beginning of each year to highlight the maintenance necessary for that year. The maintenance intervals are determined by the manufacturers' recommendations, historical experience by the maintenance department and any rules and regulations that we are obliged to adhere to. **No maintenance will be completed during Shift work, if you cannot complete tasks without maintenance being completed, move on to another task.**

### 6.4 Equipment and Supplies

In order to ensure safety of personnel and minimise damage to the environment as a result of an incident a number of protection measures are in place -  
Firefighting equipment including fire extinguishers and fire hoses

- PPE
- Chemical absorbents are located at strategic points throughout the plant to allow for the safe and efficient clean up
- Storm drain shut off valve this can be turned off in an emergency situation to prevent contamination of water supply
- Sprinkler system in place

### 7.0 Disposal of Waste Materials used in Clean Up

Any items that are used in the clean-up of a waste spill are to be placed in a drum and the drum labelled with the contents. The Quality Assurance Supervisor will issue a QW number for this material so that it can be placed in the quarantine aisle where it will wait disposal.

Should the volume of the spill be too big for ITW Shannon personnel to deal with, the hazardous waste contractors must be called immediately to deal with the waste material. The removal operation should be supervised by the Regulatory Affairs Officer so that it can be ensured that no adverse environmental impact occurs during the removal operation.

Disposal of hazardous waste should be in accordance with procedure ENV3 *Waste Management at ITW Shannon*



## Appendix 2: Important Contact Numbers

<b><u>PLANT MANAGER</u></b>	MARK MUNNELLY	MOBILE: 087 6498134
<b><u>REGULATORY AFFAIRS OFFICER</u></b>	FREDERIK S GLEERUP	+45 2168 2789
<b><u>PRODUCTION SUPERVISOR</u></b>	FINTAN GINNANE	Mobile: 086 3546010
<b><u>ENGINEERING CO-ORDINATOR</u></b>	SEAN WREN	Mobile: 086 3681288
<b><u>DOCTOR</u></b>	DR. RONAN FLYNN	22 Tullyvarraga Hill, Tullyvarraga, Shannon, Co Clare 061 362903 Mon-Fri Covers 17:00 – 18:00 gap
<b><u>SHIFT WORK DOCTOR</u></b>	Shannon Doc	1850 212 999 Mon-Fri 18:00 – 23:00 Shannon Health Centre Shannon Town Centre, Shannon, County Clare V14 Y029  Mon-Thurs 18:00-08:00 Mid-Western Regional Hospital, Gort Rd, Ennis, County Clare V95 HN29
<b><u>GARDA</u></b>	SHANNON ENNIS	061 365900

**HOSPITAL**

ENNIS GENERAL	065 6848100
LIMERICK REGIONAL	

065 6824464

**FIRE BRIGADE**

SHANNON ENNIS

061 301111

LIMERICK

999/112

065 6821616

**ADT (FIRE ALARM COMPANY)**

DUBLIN

061 407100

**GROUP 4 SECURITY**

SHANNON

01 6205980

061 418399

**EPA**

During Office Hours

0214875540

Out of Office Hours

053 9160600 or

1890 33 55 99

EDEN - User name

fsgleerup@itwpp.com

EDEN – Password

Shannon\_2023

**ENVA**

24-hour emergency no

1850 504 504

**Bord Gáis**

General Emergency Contact

1850 205050

Electricity Account Number

8280640564

Gas Account Number

8866581627

**Irish Water**

Emergency Number

1850 278 278

**HSA**

Health and Safety Authority

01 614700

**TOP SECURITY**

Accidental/False Alarm

021 4968666

General Enquires

021 4968967

Password:

**33351**

Codeword:

**polymers**

## Appendix 3: Alarm Zone Identification

<b>Zone 1</b>	Compressor Room Warehouse Shipping Office
<b>Zone 2</b>	Formulation Area
<b>Zone 3</b>	Boiler House
<b>Zone 4</b>	Boiler House Switch Room
<b>Zone 5</b>	Ground Floor Office Area Canteen
<b>Zone 6</b>	1 <sup>st</sup> Floor Office
<b>Zone 7</b>	Detectors on Top of Both Stairs (Front and back Stairs)
<b>Zone 8</b>	Conference Room and Administration Offices
<b>Zone 9</b>	Temperature Controlled Room SD
<b>Zone 12</b>	MMA Room

### Faults

Zone 11- 5 AMP PSV Fault Zone

12- Sprinkler Alarm Signal.

## Appendix 4: Classification of Environmental Incidents

To determine the significance of an incident the Agency provides the following classification system, which is based on their effect or potential to impact on the environment. Licensees/COA holders should rank all reported incidents into one of the rankings listed below when reporting incidents to the EPA.

An incident is typically defined in the IE/Waste licences as:

- an emergency [An emergency is defined as any unexpected or potentially dangerous situation, requiring immediate action which may have caused, or might have caused if the action had not taken place, an unauthorised environmental release or breach of licence conditions]
- any emission which does not comply with the requirements of IE licence
- any exceedance of the daily duty capacity of the waste handling equipment
- any trigger level specified in this licence which is attained or exceeded
- any indication that environmental pollution has, or may have, taken place

Table 1 provides the definitions associated with each level of environmental impact and should be used as a basis for the assessment of an incident. The following should also be considered as part of the assessment:

- The effects on water quality
- The potential for damage to an ecosystem (e.g. impact on fish population)
- Any requirement for notification or closure of potable water extractors
- The potential reduction in amenity value
- The potential for damage to agriculture or commerce
- The broader impact on man
- The remedial action necessary
- The likely timescale of short term and longer-term environmental consequences
- The environmental consequences of likely response action
- Any injury or loss of life caused by the incident

The environmental impact scale used in Table 1 is the same as that used in the National Framework for Major Emergency Management (MEM). The MEM definitions are given in italics below with further EPA criteria in regular font. The new classification system goes from 1 to 5 with one being a minor impact on the environment up to 5 being Catastrophic.

Ranking	Classification Impact on the environment	
1	Minor	<ul style="list-style-type: none"> <li>• <b>No contamination, localised effects</b></li> <li>• Minor effect on air quality as evidenced by dust or odour complaint(s)</li> <li>• ELV breaches</li> <li>• An emission which does not comply with the requirement of the licence/COA (A pattern of repeated minor incidents should be taken into account when considering the level of response)</li> </ul>
2	Limited	<ul style="list-style-type: none"> <li>• <b>Simple contamination, localised effects of short duration</b></li> <li>• Local limited impact to water, land and air</li> <li>• Notification to and short-term closure of potable water extractors required</li> </ul>
3	Serious	<ul style="list-style-type: none"> <li>• <b>Simple contamination, widespread effects of extended duration</b></li> <li>• Significant effects on water quality</li> <li>• Major damage to an ecosystem (e.g. significant impact on fish population)</li> <li>• Longer term closure of potable water extractors</li> <li>• Significant reduction in amenity value</li> <li>• Significant Damage to agriculture or commerce</li> <li>• Significant Impact on man</li> </ul>
4	Very Serious	<ul style="list-style-type: none"> <li>• <b>Heavy contamination, localised effects of extended duration</b></li> </ul>
5	Catastrophic	<ul style="list-style-type: none"> <li>• <b>Very heavy contamination, widespread effects of extended duration</b></li> </ul>

**Table 1 – Environmental Impact Assessment Criteria**

## **Appendix 5: Notification of Incidents to the EPA**

The licensee/COA holder is required to communicate the details of the incident by telephone and via the EDEN web portal to the EPA. The licensee/COA holder should fill in the Incident Notification Form on the EDEN portal as per the incident notification requirements of our licence/COA. Licensees/COA holders should continue to report incidents to the EPA Regional Inspectorate from where your OEE inspector is based.

- **During Office Hours**

The licensee/COA holder is required to communicate the details of the incident to an EPA inspector by telephone and via the EDEN portal. It is not appropriate to email or leave a telephone message for an inspector. Office hours are 09:00 – 17:00, Monday to Friday.

- **Outside Office Hours**

The licensee/COA holder is required to communicate the details of the incident by telephone and via the EDEN system using the Incident Notification Form. Notifications of environmental incidents outside normal working hours can be made by telephone to EPA headquarters on telephone number 053 9160600 or 1890 33 55 99, or by telephoning any of the Regional Inspectorates. Callers are given the option to record a message or an urgent environmental pollution incident message.

Licensees/COA holders are advised that all Rank 2 to 5 incident notifications should be recorded as urgent environmental pollution incidents to ensure that the message is accessed and assessed by EPA staff. The EPA staff member will assess the message and decide what action/response is required by the EPA. Rank 1 Incident notifications should be recorded as a non-urgent environmental incident.

### **Follow up and close out of incidents by the EPA**

Following the investigation of an incident the EPA's site inspection report, when completed, will be placed on the public file. Further follow up of the incident may include verification of the corrective actions, preventative actions and remediation measures taken by the company, determination of the significance and impact if any and specification of any further enforcement action considered necessary by the Agency.

In general, incidents that have no offsite impact or onsite health impact will not be posted on the website. Typical incidents that will not be published to the EPA web site include:

- Spills that are fully contained on site in bunds or tanks.
- Minor spills where the material is removed in sawdust/sand/soil.
- Non-compliance with licensed/COA emissions that are not significant and that are being dealt with by way of an agreed programme of works or corrective action by the company.
- Thermal oxidiser bypasses that are in accordance with the EPA protocol for such by-passes.
- Odour complaints unless indicating more significant pollution problems.
- Exceeded trigger levels at landfills that are not significant and that are being dealt with by way of an agreed programme of works or corrective action by the company.
- Landfill Flare breakdown.
- Acts of vandalism with no environmental impact.
- Minor fires that are dealt with on-site.

The timeline for close out of the notification on the website will vary depending on the complexity and seriousness of the incident. The objective will be to post an update to the original website notice within *one month* of the incident occurring in the case of noncomplex incidents and within *two months* of complex incidents. Notices will be removed from the website *two months* after the close out paragraph has been added to the original notice or in the case of incidents which result in enforcement action after the case has been heard.

### **Publication of incidents to the website**

Typically, incidents of Rank 2 and higher will be posted to the Web where the following occurs or has potential to occur.

- Major fish kill.
- Gross environmental pollution.
- Significant disruption of downstream WWTP'S.
- Disruption of drinking water supplies.
- Disruption to users of amenity areas.
- Danger as a result of environmental pollution to residents in the locality.
- Major fire resulting in environmental pollution.
- Significant clean-up expected as a result of a specific incident.
- Involvement of emergency services.
- Where there are a notable number of complaints or there is a need to reassure the public that there is no environmental impact.

Prior to publication of an incident on the website, a review with site personnel will be conducted by the EPA and the facility will be informed of the intention to post the notification.

## Appendix 6: Incident Notification Form

### Incident Notification Form

Licence/COA Number Licence/COA Name											
Licensee/COA Address:											
Incident notification form submitted by:											
Licenses/COA holders Environmental Impact Ranking:	<table border="1"> <tr> <td>1</td> <td><input type="checkbox"/></td> <td>2</td> <td><input type="checkbox"/></td> <td>3</td> <td><input type="checkbox"/></td> <td>4</td> <td><input type="checkbox"/></td> <td>5</td> <td><input type="checkbox"/></td> </tr> </table>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>
1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>		
Details of incident:											
Date of incident:											
Approximate start time of incident (Provide range if time is not known)											
Details of when incident first noticed:											
Still ongoing: Yes/No											
Finish time and date											
New or reoccurring incident <sup>1</sup>											
Uncontrolled release:	<table border="1"> <tr> <td>releas</td> <td><input type="checkbox"/></td> <td>Water</td> <td><input type="checkbox"/></td> <td>Sewer</td> <td><input type="checkbox"/></td> <td>Ground</td> <td><input type="checkbox"/></td> <td>No uncontrolled</td> </tr> </table>	releas	<input type="checkbox"/>	Water	<input type="checkbox"/>	Sewer	<input type="checkbox"/>	Ground	<input type="checkbox"/>	No uncontrolled	
releas	<input type="checkbox"/>	Water	<input type="checkbox"/>	Sewer	<input type="checkbox"/>	Ground	<input type="checkbox"/>	No uncontrolled			

Incident Nature (Explosion, Fire, Spillage, Odour, Breach of ELV, Monitoring Equipment offline, Trigger Level Reached, Uncontrolled Release, Other – specify)	
Details of any vulnerable receptors	

Details of ELV Exceedance if available <sup>2</sup> (Provide measurement units for values provided)	<table border="1"> <tr> <td>Parameter</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Value</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Parameter							Value						
	Parameter														
Value															
Grab or Composite sample															
Location of incident: Discharge point/Other															
Digital Photographs taken:	Yes/No														
Odour <sup>3</sup>	Not applicable <input type="checkbox"/> Odour detected <input type="checkbox"/>														
Odours detected															
Extent <sup>4</sup>	Intermittent <input type="checkbox"/> Persistent <input type="checkbox"/>														
Sensitivity <sup>5</sup>	Remote <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Extra <input type="checkbox"/>														
Intensity <sup>6</sup>	Faint <input type="checkbox"/> Moderate <input type="checkbox"/> Strong <input type="checkbox"/> Very strong <input type="checkbox"/>														
Weather at time of incident:															
Wind Direction:															
Details of who was notified:	EPA by telephone <input type="checkbox"/> Local Authority <input type="checkbox"/> Fisheries <input type="checkbox"/> Other														
Corrective actions taken:															
Preventative actions taken or planned:															
Likelihood of reoccurrence															
Details of any other relevant detail or supporting information for submission to the Agency															

<b>This section should be completed by the licensee/COA holder for their records once the corrective and preventative actions are complete<sup>7</sup></b>	
<b>Follow up actions</b>	
<b>Close out date</b>	
<b>Signed</b>	
<b>Position</b>	

**Explanatory notes:**

1. A Reoccurring incident is defined as an incident that has taken place which is similar to a previous incident and both took place because of the same cause.
2. If monitoring results are not available at the time of the incident notification they should be forwarded to the Agency as soon as they become available.
3. For further information on Odour Assessment please refer to the document 'Odour impact Assessment Guidance for EPA licensed sites' on the EPA website:  
<http://www.epa.ie/downloads/advice/air/emissions/name,28713,en.html>
4. Odour Extent: Intermittent (detected intermittently during the period of assessment) or Persistent (detected throughout the period of assessment).
5. Odour Sensitivity: Remote (no housing, commercial/industrial premises or public area within 500m of observation point); Low sensitivity (no housing, commercial/industrial premises or public area within 100m of observation point); Moderate sensitivity (housing commercial/industrial premises or public area within 100m of observation point); High sensitivity (housing, commercial/industrial premises or public area within area of observation point); Extra sensitive (complaints arising from residents, business and users of public areas within area of observation point).
6. Odour Intensity: Faint Odour (barely detectable, need to stand still and inhale facing into wind); Moderate Odour (easily detectable while walking and breathing normally, possibly offensive); Strong Odour (bearable but offensive – might make clothes / hair smell?); Very Strong Odour (unbearable, difficult to remain in area affected by odour).
7. This section is separate to the initial incident notification. This section should be completed by the licensee/COA holder after the corrective and preventative actions have been completed and the incident can be closed out. It should be maintained on site as part of the licensee's /COA holder's records

## Leaving a Phone Message Outside Office Hours

The licensee/COA holder is required to communicate the details of the incident by telephone and via the EDEN portal. Notifications of environmental incidents outside normal works hours can be made by telephone to EPA headquarters on telephone number 053 9160600 or 1890 33 55 99, or by telephoning any of the Regional Inspectorates. Callers are given the option to record a message or an urgent environmental pollution incident message.

If a caller dials HQ, or a Regional Inspectorate they will hear a standard greeting and are given options to record a message as follows:

- *“Thank you for calling the Environmental Protection Agency. Our office hours are from 9 am to 5pm Monday to Friday. Please hold now to hear further options”*
- *“If you wish to leave a message for the Environmental Protection Agency, which will not be dealt with until the following day, please dial 1 now”*
- *“If you wish to report an urgent environmental pollution incident requiring immediate response please dial 2 now”*
- *“To listen to this recorded message again, please dial 3 now”*

If the caller selects Options 1 or 2 a further message is played as follows:

### **Option 1**

*“After the tone please leave a message for the Environmental Protection Agency and your name and contact telephone number. Your message will be dealt with when our offices re-open” If you wish to return to the main menu press 0.”*

### **Option 2**

*“After the tone please leave a message detailing the nature, extent and location of the environmental pollution and your name and contact telephone number. If you wish to return to the main menu press 0.”*

Note: Urgent environmental Pollution incidents are for incidents with a ranking of 2 to 5.

## Appendix 7 List of Chemicals, Products and Fuels on Site

Material/Substance	Stock Code	Danger Category	Hazard Statements	Precautionary Statements
MODAFLOW	1019	Not Classified	Not Classified	Not Classified
BENZYL ALCOHOL	1121	Harmful	H302, H332, H319	P260, P280, P305+P351+P338, P308+P310
PROPYLENE CARBONATE	1147	Irritant	H319	P261, P280, P305+P351+P338, P337+P313
PARALOID EXL2300G	1202	Not Classified	Not Classified	Not Classified
BENZOFLEX 9-88	1211	Dangerous to the environment	H412	P273, P501
EPIRES SU 2.5	1212	Irritant	H315, H319, H317, H335	P280, P271, P260, P270, P264, P272, P314, P304+P340, P312, P302+P352+P362, P332+P313, P305+P351+P338+P313
MMA/M-122/22-28 PP HQ	1221	Flammable, Irritant	H225, H315, H317, H335	P210, P233, P261, P262, P280, P333+P313
ATOCHEM N-DODECYL MERCAPTAN	1225	Corrosive, Dangerous to the environment	H314, H317, H410	P260, P273, P280, P303+P361+P353, P305+P351+P338,P310
TS 340	1262	Not Classified	Not Classified	Not Classified
Duralum PB/F220 grit Aluminium	1300	Not Classified	Not Classified	Not Classified
AC 99 LI-325 T-61	1302	Not Classified	Not Classified	Not Classified
ALUMINIUM POWDER 1400	1304	Not Classified	Not Classified	Not Classified
F TYPE PALE GOLD	1314	Not Classified	Not Classified	Not Classified
DEEP GOLD 336/0485	1316	Not Classified	Not Classified	Not Classified
Silica Sand M31	1318	Not Classified	Not Classified	Not Classified

VICRON 1515	1322	Not Classified	Not Classified	Not Classified
SILICON CARBIDE £20	1328	Not Classified	Non hazardous	Non hazardous

MONARCH 120 / 125 FLUFFY	1338	Not Classified	Not Classified	Not Classified
IRON POWDER W10025	1352	Not Classified	Not Classified	Not Classified
STAINLESS STEEL 304LHD	1372	Acute Toxicity (Irritant)	H317, H351, H372	P260, P280, P314, P333+P313, P501
TIOXIDE® R-TC90	1378	Not Classified	Not Classified	Not Classified
HYDROQUINONE 99%	1386	Harmful, dangerous for the environment	H318, H341, H317, H351, H302, H400	P280, P305+P351+P338, P302+P352,P310,P273
MISTRON MONOMIX G	1399	Not Classified	Not Classified	Not Classified
BENTONE 27	1410	Not Classified	Not Classified	Not Classified
TIXOGEL VZ	1435	Not Classified	Not Classified	Not Classified
THIXCIN R ELEMENTIS	1450	Not Classified	Not Classified	Not Classified
CABOSIL 5 M AEROSIL 200	1455	Not Classified	Not Classified	Not Classified
CABOSIL N70TS (TS720)	1457	Not Classified	Not Classified	Not Classified
ANCAMINE 1767	1500	Corrosive, Dangerous to the environment	H302+H312, H314, H317, H361	P201, P261,P280,P281,P264, P301+P330+P331, P303+P361+P353,P305+P351+P338,P308+P313,P310
ANQUAMIDE 381	1501	Irritant, Dangerous for the environment	H302, H318	P280, P301+P312, P305+P351+P338,P310
ANCAMIDE® 350A Curing Agent	1511	Irritant	H315, H317, H319	P280, P264, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P310,P363, P405

ANCAMINE K54	1518	Corrosive	H315, H319	P262, P264, P280, P312, P332+P313, P337+P313
IMICURE <sup>®</sup> EMI-24 Curing Agent 90%	1520	Corrosive Harmful)	H302, H314, H317, H351	P201,P280, P281, P303+P361+P353, P305+P351+P338, P310
Gabepro <sup>®</sup> GPM-888	1521	Warning	H315, H317, H319, H412	P264, P280, P261, P273, P302+P352, P333+P313, P362, P305+P351+P338, P337+P313

ANCANINE 1768 / EPO TUF	1542	Corrosive, Dangerous to the environment	H302 + H312, H314, H317, H361fd, H410	P262,P264, P273, P280, P303 + P361 + P353, P305 + P351 + P338, P310, P333 + P313, P501
ANCAMINE 1618	1543	Corrosive, Danger	H314,H317,H4 12	P262, P273, P280, P303 + P361 + P353, P305 + P351 + P338, P310, P333 + P313, P501
KGL097-PL	1548	Harmful (Irritant)	H302+H312, H315, H319, H413	P261, P262, P280, P273, P304+P340, P301+P310, P305+P351+P338, P403+P233
RESIN R or Sur Wet R Curing Agent	1556	Corrosive, Dangerous to the Environment	H314, H411	P260, P264, P280
Triethylenetetramine , TETA	1560	Corrosive (Harmful, Irritant)	H302 + H312, H314, H317, H412	P280, P260, P273: P303 + P361 + P353 + P310, P333 + P313, P305 + P351 + P338 + P310
PEHA	1561	Corrosive, Irritant, Hazardous to Environment	H302 + H312, H314, H317, H410	P280, P260, P273
ANCAMINE <sup>®</sup> 2280 Curing Agent	1564	Harmful (Irritant)	H302, H317, H412, H318	P272, P280, P303+P361+P353, P305+P351+P338, P310
ANCAMINE 1637	1565	Acute Toxicity	H312, H318, H317, H331, H341, H373, H315	P260, P280, P281, P264 P301 + P330 + P331, P305 + P351 + P338, P310
ANCAMINE1934 200kg drum	1568	Corrosive	H314, H317, H412	P272 P280 P303 + P361 + P353, P305 + P351 + P338, P310
VORANOL 2000 L	1602	Not Classified	Not Classified	Not Classified

TRIGONOX K-90	1605	Acute Toxicity, Oxidising, Dangerous to the Environment	H242, H302 + H312, H314, H331, H335, H373, H411	P220, P234, P260, P280
DESMOPHEN 1111	1606	Harmful	H302	P301+P312
POLY G 30-400T / TP440 POLYOL	1607	Not Classified	H226, H336	P210, P280, P303+P361+P353, P304+P340, P370+P378
3,5-Dimethyl-1hexyn-3-ol	1614	Acute Toxicity if swallowed	H226, H302, H315, H319	P210, P280, P305+P351+P338

Methacrylic Acid	1631	Corrosive	H302+H332, H311, H314, H335	P280, P303+P361+P353, P305+P351+P338
MALEIC ACID DISPERSION	1633	Irritant	H315, H319, H317, H335	P261, P271, P280, P264
KEN-REACT KR55	1662	Irritant	H227, H315, H319	P210, P315, P319
DISPERSION BYK 130	1693	Irritant, Dangerous for the environment, Flammable	H226, H317, H319, H335, H336, H410, EUH066	P210, P261, P273, P280
BYK A 501	1700	Flammable, Harmful, Dangerous for the Environment	H226, H335, H336, H411, EUH066	P210, P261, P273, P280
HY PHY 1055 OLEIC ACID	1726	Not Classified	Not Classified	Not Classified
ES80002 S30 BLACK	1819	Not classified	Not Classified	Not Classified
EPI-TINT BLUE 3023A RESIN	1834	Health Hazard, Flammable, Irritant, Corrosive	H332, H312, H302, H315, H319, H335, H350	P261, P271, P280, P264, P270, P201, P202, P281
CARBON BLACK (VC80002)	1857	Not Classified	Not Classified	P270, P264, P271, P282, P301+P312, P305+P351+P338, P302+P352, P304+P312, P405, P273

ROCKWOOD R05097	1938	Not Classified	Not Classified	Not Classified
BUTYLATED H-T IONOL	8201	Dangerous to the environment	H400, H410	P273
TERATHANE 1000	8203	Not Classified	Not Classified	Not Classified
DURHAM CA310 ( X 11 )	8204	Not Classified	Non Hazardous	Non Hazardous
DESMODUR W/1	8205	Acute Toxicity (Irritant)	H315, H317, H319, H330, H334, H335	P260, P280, P302+P352, P304+P340, P305+P351+P338, P308+P313
MBOEA	8206	Harmful, Dangerous for the environment	H302, H351, H410	P262, P273, P261, P303+P361+P353, P301+P312

ACTICIDE DW	8210	Corrosive, Dangerous to the environment , Irritant	H302, H312, H332, H317, H410	P273, P280, P262, P303+P361+P353, P305+P351+P338, P333+P313
VERSALINK 740M	8211	Not Classified	Not Classified	Not Classified
CYCLOHEXANON	8212	Flammable, Harmful	H226, H302, H312, H315, H318, H332	P210, P241, P280
SUPRASEC 1306	8215	Harmful (Irritant)	H332, H315, H319, H334, H317, H351, H335, H373	P260, P280, P284, P304+P340, P302+P352, P305+P351+P338, P308+P311
XAIMETER ACP1000/ANTIFOAM MSA	8217	Not Classified	Not Classified	Not Classified
DIPROPYLENE GLYCOL	8218	Not Classified	Non Hazardous	Non Hazardous
TERATHANE 2000	8219	Not Classified	Not Classified	Not Classified
SUPRASEC 2020	8220	Harmful (Irritant)	H332, H315, H319, H334, H317, H351, H335, H373	P260, P280, P284, P304, P340, P302+P352, P305+P351+P338, P308+P311
BENZOYL CHLORIDE	8223	Corrosive	H314	P305+P352+P338

METHYLENE CHLORIDE	8232	Harmful (Irritant)	H315, H319, H335, H336, H351, H373	P201, P202, P260, P261, P264, P271, P280 P302+P352 P304+P340, P305+P351+P338, P308+P313, P312, P314, P321, P332+P313 P337+P313, P362+P364 P403+P233, P405, P501
XYLENE	8240	Flammable, Harmful	H226, H332, H312, H315, H319, H335, H373, H304, H412	P201, P210, P260, P273, P280, P301+P310, P331, P370+P378, P303+P361+P353, P308+P311
BUTANE DIOL 1.4	8249	Harmful	H302, H336	P261, P264, P270, P271, P301+P312, P330, P304+P340
THORCAT PMDDS	8250	Acute Toxicity Dangerous for the environment	H301, H314, H361d, H372, H410	P273, P280, P303+P361+P353, P305+P351+P338
JAYFLEX DIDP	8256	Not Classified	Not classified	Not Classified

BYK A 500	8260	Flammable, Health Hazard, Irritant, Dangerous for the Environment	H226, H304, H335, H336, H411, EUH066	P210, P261, P273
IRGALITE BLACK 1105	8271	Not Classified	Not Classified	Not Classified
REACTINT ORANGE X96	8294	No Symbol Required	H412	P273, P501
BYK - 053	8296	Flammable, Health Hazard, Irritant, Dangerous for the Environment	H226, H336, H372, H411, EUH066	P210, P260, P273
BYK - 306	8297	Flammable, Health Hazard, Irritant	H226, H304, H315, H319, H332, H335, H373	P210, P260, P280

KOLLERDUR MO180/26%	8306	Flammable, Harmful	H226, H315	P210, P241, P280, P302+P352, P303+P361+P353, P321
ETHACURE 100	8402	Harmful, Dangerous for the environment	H319, H312, H302, H373, H400, H413	P264, P280, P270, P260, P273,
MILLISIL M-6 1000kg BULK BAG	9200	Harmful, Warning	H373	P260, P285, P501
MILLISIL M-6 450kg BAG	9201	Harmful	H373	P260, P285, P285, P501
UOP T PASTE	9217	Not Classified	Not Classified	Not Classified
Desmophen 1652	9236	Not Classified	Not Classified	Not Classified
ADDOCAT DB	9238	Flammable, Acute Toxicity, Corrosive	H225, H332, H302+H312, H314	P210, P233, P240, P241, P242, P243, P280, P222, P260, P264, P270
GAROFLAM SB100	9239	Harmful	H351	P201, P202, P280, P308+P313
Saytex 102		Not Classified	Not Classified	Not Classified
SILITIN N85	9241	Not classified	Not Classified	Not Classified
BAYMIDUR K88	9310	Harmful (Irritant)	H332, H319, H335, H315,	P261, P271, P264, P280, P285, P272, P260

			H334, H317, H373	
MAGSIL STAR TALC 350 MESH	8050 2	Not Classified	Not Classified	Not Classified
ULTRAMARINE BLUE 5009 RS	8060 0011	Not Classified	Not Classified	Not Classified
DER 331 RESIN	8010 0100 1	Irritant, Dangerous for the environment	H315, H319, H317, H411	P280, P273, P302+P352, P305+P351+P338, P313, P501
EPIKOTE 862/NPEF 170	8010 0104 2	Irritant, Dangerous for the environment	H315, H317, H411	P261, P264, P280, P302+P352, P305+P351+ P338, P501

ANCAMIDE 500	8020 0104 0	Corrosive, Dangerous to the environment	H314,H317,H4 10	P261,P273,P280
ANCAMIDE 501	8020 0104 1	Corrosive, Dangerous to the environment	H314, H317, H400, H410, H361f	P260, P264, P280, P261, P272, P273, P201, P202, P281
PINE OIL 60	8030 0100 6	Flammable, Irritant, Dangerous for the environment	H226,H302,H3 15,H317,H319, H400, H410	P210,P233,P280,P301+310, P303+361+353,P305+351+338
BUTYROLACTONE	8030 0101 6	Harmful	H302, H318, H336	P264, P270, P280, P261, P271
PC 1344 / AD3344	8030 0102 3	Not Classified	Non Hazardous	Not Classified
EPODIL LV5	8030 0102 6	Not Classified	Non Hazardous	Non Hazardous
1, 2 CYCLOHEXANEDICAR BOXYLIC ACID DIISONONYL ESTER	8030 0103 0	Non Hazardous	Not Classified	Not Classified
SILANE A 187 / BYK990	8040 0002 1	Irritant	H318	P280, P305+P351+P338, P310
GLYCERINE 99.5% PHARMACEUTICAL	8040 0003 3	Not Classified	Non Hazardous	Non Hazardous

BYK-R-605	8040 0003 8	Flammable, Health Hazard, Irritant, Dangerous for the Environment	H226, H315, H318, H335, H336, H373, H412	P210, P260, P273, P280
NO 3 SAND /QUARTZ 419 (1.0-3.0	8050 0500 8	Not Classified	Non Hazardous	Non Hazardous

FLINT SILICA #13	8050 0501 1	Not Classified	Non Hazardous	Non Hazardous
CPO3 3000 GRADE	8050 0700 5	Not Classified	Non Hazardous	Non Hazardous
L30 SAND	8050 0700 7	Not Classified	Non Hazardous	Non Hazardous
FIBRETEC 3032 MICROGLASS	8050 0700 8	Not Classified	Non Hazardous	Non Hazardous
CPO3 2000 GRADE	8050 0700 9	Not Classified	Non Hazardous	Non Hazardous
DURCAL 15 (OMYA 14)	8050 0800 3	Not Classified	Non Hazardous	Non Hazardous
ON313 S MARTINALTRIHYDRATE	8050 1100 7	Not Classified	Non Hazardous	Non Hazardous
ORANGE POWDER BLEND DX00418 BE	8060 0000 8	Not Classified	Non- Hazardous	Non-Hazardous
ANCAMIDE 2347	2347	Irritant	H319, H315, H317, H412, H413	P264, P280, P261, P272, P273
M6 SILICA / 25kg BAG	360P R	Health Hazard	H373	P260, P285, P501
AKASIL ADP 100	8030 0100 4B	Not Classified	Not Classified	Not Classified
GARAMITE 1958	CE10 000	Not Classified	Not Classified	Not Classified
ZINC OXIDE	CE10 01	Dangerous to the environment	H410	P273, P391, P501
ZINC PHOSPHATE	CE10 02	Dangerous to the environment	H410	P273, P391, P501

EP SUPER BLACK/WS26210A	CE10 03	Irritant, Dangerous for the environment	H315, H317, H319, H411	P261, P264, P272, P273, P280, P302+P352, P305+P351+P338, P321, P332+P313, P333+P313, P337+P313, P362+P364, P391, P501
BYK A 525	FU10 07	Flammable, Dangerous to the environment	H226, H304, H336, H372, H411	P210, P260, P273
AMINOETHYLPIPERA ZINE	K100 3	Corrosive, Health Hazard, Acute Toxicity	H302, H311, H314, H317, H361, H372, H412	P201, P260, P273, P280
RUETASOLV DI	K100 5	Health Hazard, Dangerous to the environment	H304, H410	P260, P273, P280, P301+P330+P331, P305+P351+P338, P370+P378, P403+P233, P501
MICRODOL H200 25kg BAG	K100 9	Not Classified	Not Classified	Not Classified
LECITHIN	K102 0	Not Classified	Not classified	Not classified
ARALDITE GY 764 CH	RM0 504	Irritant, Dangerous for the environment	H319, H315, H317, H411	P264, P280, P261, P272, P273
BYK W980	RM0 864	Irritant	H315, H317	P261, P264, P280
Toluene	Non stock	Flammable, Health Hazard, Irritant	H225, H304, H315, H336, H361d, H373, H412	P201, P210, P273, P301+P310+P331, P302+P352, P308+P313
Acetic Acid Glacial	Non stock	Flammable, Corrosive	H226, H314	P260, P280, P284, P301+P330+P331, P302+P352, P304+P340, P305+P351+P338, P308+P313
Acetone	Non stock	Flammable, Irritant	H225, H319, H336, EUH066	P210, P303+P361+P353, P280, P337+P313, P304+P340, P312
Butanox LPT	Non stock	Flammable, Corrosive, Irritant	H242, H314, H332	P210, P234, P280, P303+P361+P353, P305+P351+P338, P370+P378

Crystal Violet Solution	Non stock	Flammable, Corrosive	H226, H314	P210, P243, P280, P301+P330+P331, P302+P352, P304+P340, P305+P351+P338, P308+P310, P403+P235
Crystal Violet	Non stock	Corrosive, Health Hazard, Irritant, Dangerous to the environment	H302, H318, H351, H410	P273, P280, P305+P351+P338
Di-n-butylamine	Non stock	Flammable, Acute Toxicity, Corrosive	H226, H301, H311, H314, H330	P280, P301+P330+P331, P302+P350, P304+P340, P305+P351+P338, P310
Lithium Chloride in Acetic Acid	Non stock	Corrosive	H226, H314	P501, P403+P235, P370+P378, P303+P361+P353, P280, P243, P242, P241, P240, P233, P210, P405, P305+P351+P338, P321, P310, P304+P340. P363, P301+P330+P331, P264, P260
Isopropanol	Non stock	Highly Flammable, Irritant	H319, H336	P210, P233, P240, P241, P242, P305+P351+P338
Hydranal 5K reagent	Non stock	Health Hazard	H351, H360D, H373	P260, P280, P284, P308+P313
Solvent AK	Non stock	Very Acute Toxicity	H226, H330, H310, H300, H315, H351, H373, H332, H302	P501, P403+P235, P370+P378, P303+P361+P353, P280, P243, P242, P241, P240, P233, P210, P405, P321, P301+P310, P270, P264, P361+P364, P310, P302+P352, {262, P403+P233, P320, P3-4+P34-, P284, P271, P260, P362+P364, P332+P313, P202, P201
Methanol	Non stock	Flammable, Acute Toxicity, Health Hazard	H225, H301+H311+H331, H370	P210, P280, P301+P310+P330, P302+P352+P312, P304+P340+P311
Perchloric Acid	Non stock	Flammable, Corrosive, Health Hazard	H226, H314	P210, P280, P301+P330+P331, P305+P351+P338, P308+P310

Sodium Hydroxide		Corrosive	H314, H402	P260, P264, P273, P280, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P310, P363, P405, P501
Tetraethyl Ammonium Bromide	Non stock	Irritant	H319, H335, H315	P264, P280, P261, P271
Trigonox K80	Non stock	Dangerous to the environment , Oxidising, Acute Toxicity	H242, H302+H312+H332, H314, H373, H411	P220, P234, P235, P260, P280
5 Min Epoxy Hardener	X0040	Irritant	H315, H319	P280, P302+P352, P305+P351+P338, P332+P313, P337+P313
5 Min Epoxy Resin	X0039	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P353, P305+P351+P338, P333+P313
Aluminium Liquid F2 Hardener	X0014	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P308+P313, P333+P313, P501
Aluminium Liquid F2 Resin	103/X0002	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P353, P305+P351+P338, P333+P313
Aluminium Putty (F) Hardener	10112H, 10115H, 10261H, 10611H, 11411H	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H315, H317, H319, H411	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501

Plastic Steel 5 Minute Putty(A) Hardener	1011 2H, 1011 5H, 1026 1H,	Corrosive, Dangerous for the environment , Irritant,	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501
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	1061 1H, 1141 1H	Health Hazard		
Aluminium Putty (F) Resin	1011 2H, 1011 5H, 1026 1H, 1061 1H, 1141 1H	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501
Plastic Steel 5 Minute Putty(A) Resin	1011 2R, 1011 5R	Irritant	H315, H317, H319, H412	P273, P280, P302+P352, P305+P351+P338, P333+P313
Aluminium Wear Compound Resin	Adhesive	Irritant, Dangerous for the environment	H315, H317, H319, H411	P261, P264, P272, P321, P332+P313, P337+P313, P362+P364, P391, P501
Aluminium Wear Compound Hardener	Hardener	Irritant, Corrosive, Health Hazard, Dangerous to the environment	H312, H314, H317, H361fd, H411	P261, P273, P280, P303+P361+P353, P305+P351+P338, P308+P313

Bronze Putty Hardener	1011 2H, 1011 5H, 1026 1H, 1061 1H, 1141 1H	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501
Bronze Putty Resin	1026 1R/X 0003	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Brushable Ceramic Blue Resin	X003 0	Irritant, Dangerous	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313

		for the environment		
Brushable Ceramic Blue Hardener	X001 7	Irritant, Dangerous for the environment	H302+H332, H314, H317, H373, H412	P260, P270, P280, P303+P361+P353, P305+P351+P338, P314
Brushable Ceramic Red Hardener	X001 7	Irritant, Corrosive, Health Hazard	H302+H332, H314, H317, H373, H412	P260, P270, P280, P303+P361+P353, P305+P351+P338, P314
Brushable Ceramic Red Resin	X003 0B	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Brushable Ceramic TW White Resin	121	Irritant	H315, H317, H319	P264, P280, P261, P272
Devweld 530 Activator	X013 7	Irritant, Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
Devweld 530 Adhesive	Adhe sive	Irritant, Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P332+P313, P501
Devweld 531 Activator	Activ ator	Irritant, Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501

Devweld 531 Adhesive	Adhesive	Irritant, Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
Flexane 60L Hardener	X0022	Harmful, Dangerous for the environment, Health Hazard	H319, H373, H411	P280, P305+P351+P338, P314, P501
Flexane 60L Resin	X0021	Irritant, Health Hazard	H315, H317, H319, H332, H334, H335	P261, P280, P302+P352, P304+P340, P305+P351+P338, P333+P313
Flexane 80-94L Hardener	X0023	Health Hazard, Dangerous for the environment, Irritant	H302, H319, H373, H410	P273, P280, P305+P351+P338, P314, P501
Flexane 80 Resin	X0020	Irritant, Health Hazard	H315, H317, H319, H332, H334, H335	P261, P280, P302+P352, P304+P340, P305+P351+P338, P333+P313

Flexane 94 Resin	X0024	Irritant, Health Hazard	H315, H317, H319, H334, H332, H335	P280, P302+P352, P304+P340, P305+P351+P338, P333+P313
Flexane GP Putty Hardener	X0025BB	Irritant, Health Hazard, Dangerous for the environment	H302, H319, H373, H410	P273, P280, P305+P351+P338, P314, P501
Flexane GP Putty Resin	X0025B	Irritant	H317, H334, H351	P261, P280, P284, P302+P252, P304+P340, P333+P313
Flexane High Performance Brushable Hardener	X0104	Health Hazard, Dangerous for the environment, Irritant, Flammable	H226, H319, H373, H411	P210, P260, P273, P280, P305+P351+P338, P314
Flexane High Performance Brushable Resin	X0103	Flammable, Acute Toxicity, Health Hazard	H225, H315, H317, H319, H330, H334, H335, H336, H351, H412	P210, P261, P280, P284, P303+P361+P353, P308+P313

Flexane High Performance Putty Resin	6639n	Flammable, Health Hazard, Irritant	H225, H315, H317, H319, H334, H335, H336, H351, H361, H373	P210, P233, P240, P241, P242, P243, P280, P264, P261, P272, P271, P264, P285, P201, P202, P260
Plastic Steel 5 Minute Putty (SF) Hardener		Not Classified	Not Classified	Non-Hazardous
Plastic Steel 5 Minute Putty (SF) Resin	X0005	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Plastic Steel (B) Liquid Hardener	X0014	Corrosive, Dangerous for the environment, Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P308+P313, P333+P313, P501
Plastic Steel (B) Liquid Resin	X0009	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313

Stainless Steel Putty (ST) Hardener	X0046	Corrosive, Irritant	H314, H317, H412	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313
Stainless Steel Putty (ST) Resin	X0006	Irritant, Health Hazard	H315, H317, H319, H351, H372, H412	P270, P280, P302+P352, P305+P351+P338, P314, P333+P313
Titanium Putty Hardener	10761H, 10765H	Corrosive, Irritant, Health Hazard	H314, H317, H341, H302+H332	P261, P270, P280, P301+P310, P303+P361+P353, P305+P351+P338
Titanium Putty Resin	X0007	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Underwater Repair Putty (UW) Hardener	Hardener	Corrosive, Irritant	H314, H317	P280, P301+P330+P331, P303+P361+P353, P305+P351+P338, P310, P333+P313

Underwater Repair Putty (UW) Resin	Resin	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Wear Resistant Liquid Hardener	X001 4	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P308+P313, P333+P313, P501
Wear Resistant Liquid Resin	X001 2	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Wear Resistant Putty Hardener	1011 2H, 1011 5H, 1026 1H, 1061 1H, 1141 1H,	Corrosive, Dangerous for the environment , Irritant, Health Hazard	H314, H317, H361fd, H411	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501
Wear Resistant Putty Resin	X000 4	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313

Irathane C155	I221 2HS/ B	Flammable, Irritant, Health Hazard, Dangerous to the environment	H225, H319, H336, H373, H411	P210, P261, P273, P280, P305+P351+P338, P314
Irathane P155	I221 2HS/ A	Acute Toxicity, Health Hazard	H312, H317, H319, H331, H334, H335	P261, P280, P284, P302+P352, P305+P351+P338, P333+P313

Irathane C255XD	Coating	Flammable, Dangerous for the environment, Irritant, Health Hazard	H225, H319, H336, H373, H411	P210, P261, P273, P280, P305+P351+P338, P314
Irathane P255XD	coating Applied by trowel	Irritant, Health Hazard	H317, H332, H334, H351, H412	P271, P280, P284, P302+P352, P333+P313, P342+P311
Irathane 2855 A	2855 A	Irritant, Health Hazard	H315, H317, H319, H332, H334, H335, H351, H373, H412	P261, P271, P280, P304+P340, P305+P351+P338, P312
Irathane 2855 B	2855 B	Not Classified	Not Classified	Non-Hazardous
Irabond UU55-52A	ADH UU55	Irritant	H315, H332, EUH208	P210, P261, P280, P284, P303+P361+P353, P342+P311
Irabond UU52B	ADH UU52B	Flammable, Irritant	H226, H332, H336	P210, P261, P280, P303+P361+P353, P304+P340, P403+P235
Korrobond 65 Component A	Crusher Backing Compound	Irritant	H315, H317, H319, H412	P280, P302+P352, P305+P351+P338, P333+P313, P501
Korrobond 65 Component B	KORRO65B	Corrosive, Irritant,	H302+H312, H304, H314, H317, H412	P280, P301+P310, P303+P361+P353, P305+P351+P338, P501

		Health Hazard		
Korrobond 90 Component A		Not Classified	Not Classified	Non-Hazardous

CFO Hardener	1560 D, 1010 U, 1020 U	Corrosive, Irritant	H312, H314, H317, H412	P280, P305+P351+P338, P310
CFO Hardener 620 TS	Hard ener	Corrosive, Irritant, Dangerous to the environment	H314, H317, H411	P273, P280, P303+P361+P353, P305+P351+P338, P310
CFO Resin	1011 R, 1010 U resin, 1020 U resin	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
CF Black Hardener	Hard ener	Corrosive, Irritant	H312, H314, H317, H412	P273, P280, P303+P361+P353, P304+P340, P305+P351+P338, P333+P313
CF Black Resin	Y000 5	Irritant	H315, H317, H319, H412	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
CF Blue Hardener	GP10 6H	Corrosive, Harmful to health, Irritant, Dangerous to the environment	H302, H312, H314, H317, H318, H361, H402, H411	P201, P202, P260, P264, P270, P272, P273, P280
CF Blue Resin	GP10 6R	Irritant	H315, H317, H319, H412	P261, P264, P272, P273, P280
CF Grey Hardener	Y000 4	Corrosive, Health Hazard, Dangerous to the Environment	H312, H314, H317, H361f, H412	P280, P303+P361+P338, P310, P333+P313
CF Grey Resin	Y000 3	Irritant	H315, H317, H319, H412	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501

CF Red Hardener	Y001 5	Irritant, Corrosive, Dangerous to the Environment	H314, H317, H411	P273, P280, P303+P361+P353, P305+P351+P338, P333+P313, P501
CF Red Resin	Y001 6	Irritant, Dangerous to the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
CF Red SG Hardener	Y000 8	Corrosive, Irritant	H312, H314, H317, H412	P280, P303+P361+P353, P305+P351+P338, P310, P333+P313, P501
CF Red SG Resin	Y000 7	Irritant, Dangerous for the environment , Corrosive	H315, H317, H318, H411	P273, P280, P302+P352, P305+P351+P338, P310, P501
Expansion Joint Red & Grey Hardener	Y002 4	Corrosive, Irritant	H302+H312, H314, H317, H412	P270, P280, P303+P361+P353, P305+P351+P338, P333+P313
Expansion Joint Compound Red & Grey Resin	3284 U & 3286 U	Irritant, Corrosive, Dangerous to the Environment	H315, H317, H318, H411	P261, P280, P302+P352, P305+P351+P338
Phillymastic TG-7B Paste Hardener	Y001 4	Irritant, Corrosive	H314, H317, H412	P273, P280, P303+P361+P353, P305+P351+P338, P310, P501
Phillymastic TG-7B Paste Resin	Y001 3	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
Phillymastic TG-7B Liquid Hardener	Y001 2	Corrosive, Irritant	H312, H314, H317, H412	P273, P280, P303+P361+P353, P305+P351+P338, P310, P501
Phillymastic TG-7B Liquid Resin	Y001 1	Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA420 Adhesive 20 LTR	IT102	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P304+P340, P305+P351+P338
MA420 Adhesive 200 LTR	IT100	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P304+P340, P305+P351+P338

MA300 Activator	IT408 /SM	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P332+P313
MA300 Activator 20 LTR	IT406	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P332+P313
MA300 Activator 200 LTR	IT408	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P332+P313
MA300 Adhesive	IT407 /SM	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P332+P313
MA310 Activator 20 LTR	IT406	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P304+P340
MA310 Activator 200 LTR	IT408	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P304+P340
MA310 Adhesive 20 LTR	IT435	Flammable, Irritant	H225, H315, H317, H335, H412	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA310 Adhesive 200 LTR	IT437	Flammable, Irritant	H225, H315, H317, H335, H412	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA310 Adhesive	IT437 /SM	Flammable, Irritant	H225, H315, H317, H335, H412	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA422/425 EU Activator 20 LTR	IT159	Irritant	H317, H319	P261, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA422 Adhesive 20 LTR (SCMTO)	IT132	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA425 Adhesive 20 LTR	IT152	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA425 Adhesive 200 LTR	IT150	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA530 Activator 20 LTR	IT205	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA530 Activator 50gal	IT206	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA530 Adhesive 20 LTR	IT203	Flammable, Irritant	H225, H315,	P210, P261, P280, P303+P361+P353,

			H317, H319, H335	P305+P351+P338, P333+P313
MA590 Activator 20 LTR	IT178	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA590 Activator 200 LTR	IT175	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501

MA590 Adhesive 20 LTR	IT177	Flammable, Irritant, Dangerous for the environment	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338
MA590 Adhesive 200 LTR	IT170	Flammable, Irritant, Dangerous for the environment	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338
MA920 Adhesive 20 LTR	3590 5	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA920 Adhesive 200 LTR	3591 0	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA3940 Adhesive 20 LTR	IT505	Irritant, Highly Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA3940 Adhesive 200 LTR	IT507	Irritant, Highly Flammable	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA3940LH Adhesive 20 LTR	IT505	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA3940LH Adhesive 200 LTR	IT507	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P333+P313, P501
MA3940LH EU ACT, 5GAL (NEW)	IT502	Irritant	H315, H317, H319, H412	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA3940LH EU ACT 5 GAL	IT502 /B	Irritant	H315, H317, H319, H412	P273, P280, P302+P352,

				P305+P351+P338, P333+P313, P501
MA3940LH Blue Activator		Acute Toxicity, Dangerous to the Environment	H315, H317, H319, H412	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA550 Activator		Irritant, Dangerous for the environment	H317, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA550 Adhesive 20 LTR	35200	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313

MA550 Adhesive 200 LTR	35800	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA830 Activator		Irritant, Dangerous for the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA830 Adhesive 20 LTR	IT185	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA830 50GAL ADH	IT188	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA320 White Activator		Irritant, Dangerous for the environment	H317, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313, P501
MA2045/2090/1025 Activator	IT247	Corrosive, Irritant	H314, H317, H319, H332, H412	P280, P302+P352, P305+P351+P338, P333+P313, P501
MA2045 Adhesive 20LTR	IT196	Highly Flammable, Dangerous for the environment , Irritant	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338

MA2045 Adhesive 200LTR	IT209	Highly Flammable, Dangerous for the environment , Irritant	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338
MA2090 Adhesive 20 LTR	IT195	Highly Flammable, Dangerous for the environment , Irritant	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338
MA2090 Adhesive 200L	IT221	Highly Flammable, Dangerous for the environment , Irritant	H225, H315, H317, H319, H335, H411	P210, P261, P273, P280, P303+P361+P353, P305+P351+P338
MA420 EU CLEAR ACT/PAIL	IT112	Irritant	H315, H317, H319, H412	P210, P261, P280, P302+P352, P305+P351+P338

MA420EU/920/1020 ACTIVATOR 20	IT114	Irritant	H315, H317, H319, H412	P210, P261, P280, P302+P352, P305+P351+P338
MA1020 Adhesive 20 LTR	IT220	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA1025 Adhesive 20 LTR	IT236	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA832 Adhesive 20 LTR	IT330	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
MA832 Adhesive 50gal	IT333	Irritant, Flammable	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
Nitrogen	N/A	Gas Cylinder	H280	P403
Hydraulic Oil		Not Classified	Not Classified	Non-Hazardous
SUPRASEC 2447	FU10 00	Irritant, Harmful	H315, H317, H319, H332, H334, H335, H351, H373	P260, P280, P285, P304+P340, P302+P352, P305+P351+P338, P309+P311
SILBOND W6EST 25KG BAGS	9202	Harmful	H373	P260, P501

M-POX RX 50	K100 6	Irritant	H312, H332, H315, H317	P261, P280, P321, P322, P362, P501
SILBOND W12EST 25KG BAGS	9203	Harmful	H372	P260, P501
CKFAST RED AGG 20.9KG	1070 A	Health Hazard	H350	P202, P280, P308+P314
CHEMCURE® 147 C/A 420LB DRM	8020 0104 00	Corrosive, Irritant, Environment al Hazard	H314, H318, H317, H411	P260, P264, P272, P273, P280
BTA-751U	1228 A	Not Classified	Non- Hazardous	Non-Hazardous
SILITE (CLEAR) 310ML	X010 7	Not Classified	Non- Hazardous	Non-Hazardous
ASA POW XC-520	1209 A	Not Classified	Non hazardous	Non hazardous
MA300 Black 50ml	IT410	Flammable, Corrosive, Irritant	H225, H312, H314, H317, H318, H332, H335	P210, P233, P240, P241, P242, P243, P280, P260, P264, P261, P272, P271
HELOXY HD	8030 0100 5	Irritant	H412, H319, H315, H317	P280, P273, P261, P264, P272

ARADUR- BD 350 for EP36P/ hard	9010 0	Corrosive, Irritant, Dangerous to the environment	H314, H318, H317, H400, H410	P280, P273
SILITE (WHITE)	X010 7A	Not Classified	Not Classified	Not Classified
ONE MINUTE EPOXY GEL 50ML	1427 7	Irritant	H319, H315, H317, H335	P261, P264, P271, P272, P280, P302+P352, P304+P340, P305+P351+P338
TIXOGEL VP in Sacks 25 kg	9007 0	Not Classified	Not Classified	Not Classified
ZIP PATCH REPAIR KIT - Adhesive	X005 6	Flammable, Corrosive, Irritant, Health Hazard	H225, H314, H317, H335, H351, H373, H420	P210, P261, P280, P303+P361+P353, P305+P351+P338, P308+P313

ZIP PATCH REPAIR KIT - Activator	X005 7	Flammable, Corrosive, Irritant, Health Hazard	H225, H315, H317, H319, H335, H341	P210, P261, P280, P302+P352, P304+P340, P305+P351+P338
FLEXANE FL-20 PRIMER 112ML	1598 5	Flammable, Health Hazard, Irritant	H225, H317, H319, H334, H336, H351	P210, P233, P240, P241, P242, P243, P280, P261, P272, P264, P261, P285, P271, P201, P202, P281
DER 671X75	CE10 07	Flammable, Irritant	H226, H315, H317, H319, H335, H412	P210, P260, P304+P340, P305+P351+P338, P501
FLEXANE FL-10 PRIMER 112ML	1598 0	Flammable, Health Hazard, Irritant	H225, H302, H304, H315, H319, H332, H335, H336, H351, H361, H373	P210, P233, P240, P241, P242, P243, P280, P264, P270, P261, P271, P201, P202, P281, P260
RELEASE AGENT 250ML	9800 0	Flammable, Irritant, Health Hazard	H226, H312, H332, H315, H304	P210, P280, P261, P301+P310, P312, P331, P233, P240, P241, P242, P243, P271, P264, P321, P370+P378, P302+P352, P303+P361+P353, P304+P340, P322, P332+P313, P362, P363, P403+P235, P405
HDK® H13L HYDROPHOBIC PYROGENIC SILICA	9001 0	Not Classified	Non- Hazardous	Non-Hazardous

PHILLYCLAD 1775/620TS 1 GAL Resin	3461 R	Irritant, Dangerous to the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
PHILLYCLAD 1775/620TS 1 GAL Hardener	Y004 6	Corrosive, Irritant, Dangerous to the environment	H302+H312, H314, H317, H411	P261, P273, P280, P301+P310, P303+P361+P353, P305+P351+P338
PHILLYBOND ORANGE 1gal Hardener	3280 U	Corrosive, Irritant, Health Hazard, Dangerous to the Environment	H302+H312, H314, H317, H361fd, H373, H411	P270, P273, P280, P303+P361+P353, P305+P351+P338, P308+P313

PHILLYBOND ORANGE 1gal Resin	3280 U	Irritant, Dangerous to the environment	H302+H312, H314, H317, H361fd, H373, H411	P270, P273, P280, P303+P361+P353, P305+P351+P338, P308+P313
PARAFFIN WAX 4051 / 2	1391	Not Classified	Not Classified	Not Classified
C255EP 1.88L	I203 1EPH	Flammable, Irritant, Health Hazard, Dangerous to the environment	H225, H319, H336, H373, H411	P210, P261, P273, P280, P305+P351+P338, P314
GLYCOL ETHER	8207	Flammable, Irritant	H226, H336	P210, P280
EPS 25	CE10 04	Irritant, Dangerous to the environment	H315, H319, H317, H411	P261, P272, P273, P280, P302+P352, P333+P313, P362, P363, P305+P351+P338, P337+P313, P391, P501
MA3940 490ML	IT900 X	Irritant	H315, H317, H318	P264, P280, P261, P272
R-FLEX BELT REPAIR 1.5lb	1556 5	Health Hazard, Irritant	H315, H317, H319, H334, H351, H361	P264, P280, P261, P272, P261, P285, P201, P202, P281
MA2045 490ML	IT248 X	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
10430 Elan-Tron PU4025 4kg (Epocast F)	1014 6	Not Classified	Not Classified	Not Classified

Elan-tron PH 4900 1kg (Epocast F)	1014 5	Health Hazard, Irritant	H315, H317, H319, H332, H334, H335, H351, H373	P201, P260, P280, P284, P304+P340, P308+P313, P312
PRC RELEASE AGENT	7068 P	Flammable, Irritant	H222, H229, H319	P410+P412, P210, P211, P251, P280, P285, P264, P305+P351+P338, P337+P313
ULTRA QUARTZ 35lb	1355 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280

EPS 70	CE10 05	Irritant, Dangerous to the environment	H315, H317, H319, H411	P261, P273, P280, P302+P352, P333+P313, P337+P313
DFENSE BLOK 30LB KIT	1133 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
WEAR GUARD (FINE LOAD)	1147 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
LIQUID RELEASE 470ML	1960 0	Flammable, Health Hazard	H224, H304, H340, H350	P210, P233, P240, P241, P242, P243, P280, P301+P310, P331, P201, P202, P281
CERAMIC REPAIR 3lb	1170 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
ANCAMINE® 2719 Curing Agent	1562	Irritant, Corrosive	H314, H317, H332, H412, EUH071	P261, P280
REPAIR COMPOUND 2 gal (Chockfast Hardener)	Y002 2	Irritant, Corrosive	H302+H312, H314, H317, H412	P261, P280, P302+P352, P305+P351+P338, P333+P313
REPAIR COMPOUND 2 gal (Chockfast Resin)	Y002 1	Irritant, Dangerous to the environment	H315, H317, H319, H411, H312	P261, P280, P302+P352, P305+P351+P338
GLYCOL ETHER PMA	8213	Flammable, Irritant	H226, H336	P210, P280
HELOXY Z8	K102 9	Irritant	H317, H315	P280, P261, P272
DFENSE BLOK (SWA)	1134 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
WEAR GUARD (HI TEMP 450) 30lb	1148 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
ETHYL ACETATE	1118	Flammable, Irritant	H225, H319, H336, EUH066	P210, P240, P261, P280, P305+P351+P338
BAYFERROX BRAUN 645T	9006 2	Not Classified	Not Classified	Not Classified

EPOXY COAT 7000 AR GREY 2 USG	1275 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
WEAR GUARD HIGH LOAD 30lb	1149 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
DFENSE BLOK FAST CURE	1135 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280

IRABOND 9924A 2.5LTR	IR99 24A	Flammable, Irritant, Health Hazard, Dangerous to the environment	H225, H315, H319, H317, H341, H411	P210, P261, P280, P303+P361+P353, P305+P351+P338, P308+P313
IRABOND 9924B 2.5 LTR	IR99 24B	Flammable, Irritant	H225, H315, H319	P210, P280, P303+P361+P353, P305+P351+P338, P332+P313. P403+P235
C255EP .35L	I203 5EPH	Flammable, Irritant, Health Hazard, Dangerous to the environment	H225, H319, H336, H373, H411	P210, P261, P273, P280, P305+P351+P338, P314
CERAMIC REPAIR 32LB	1173 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
GRAPHITE -2623	1344	Not Classified	Not Classified	Not Classified
EPOXY COAT 7000 NON VOC	1271 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
PHILLYBOND #6 Resin	Y004 5	Irritant, Dangerous to the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313
FLOOR PATCH 40LB	1312 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
BRUSH. CERAMIC 2LB(WHITE)	1177 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
SAYTEX 8010	9240	Not Classified	Not Classified	Not Classified
MA2045/2090/1025 ACTIVATOR 20L	IT247	Corrosive, Irritant	H314, H317, H319, H332, H412	P280, P302+P352, P305+P351+P338, P333+P313, P501
MA560-1 ACTIVATOR 20LTR	IT219	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271

MA560-1 ADHESIVE 20 LTR	IT213	Flammable, Corrosive, Irritant	H225, H315, H317, H319, H332, H335, H400, H401, H411	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271, P273, P273
DEVCON R-FLEX BELT REPAIR1.8kg	1555 0	Health Hazard, Irritant	H315, H317, H319, H334, H335,	P264, P280, P261, P272, P271, P261, P285
DEVCON CC 4000 HARDENER/390lb/17 7.2kg	1176 9	Corrosive, Irritant	H302, H314, H317, H318, H332	P264, P270, P260, P264, P280, P261, P272, P271
MA1020 50 GAL ADH	IT225	Flammable, Corrosive, Irritant	H225, H315, H317, H318, H335	P210, P233, P240, P241, P242, P243, P280, P264, P261, P272, P271
MA830/MA832 EU ACTIVATOR 20L	IT258	Flammable, Irritant	H242, H315, H317, H319	P210, P220, P234, P280, P264, P261, P272
MA8110 20L ACTIVATOR	8110 3	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
MA8110 20L ADHESIVE	8110 1	Flammable, Corrosive, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
Trichlorisocyanuric Acid	1119	Oxidiser, Irritant, Dangerous to the environment	H272, H302, H319, H335, H410	P210, P273, P301+P312+P330, P305+P351+P338
FLEXANE 80 PUTTY RESIN 440LB	1582 1 / D	Irritant	H315, H317, H319, H332, H334, H335, H351, H373	P264, P280, P261, P272, P264, P271, P285, P201, P202, P260
DFENSE BLOK QUICK PATCH	1132 0	Irritant	H315, H317, H319	P264, P280, P261, P272, P280, P264, P280
MA550/MA320 EU ACT 20 LTR	3542 0	Irritant	H315, H317, H319, H335	P264, P280, P261, P272, P271
MA320 ADHESIVE 200LTR	3280 0	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
MA320/MA3940 EU ACT 20 LTR	3242 0	Irritant	H315, H317, H319	P264, P280, P261, P272

FLEXANE BRUSHABLE RESIN 425lb	1535 2	Flammable, Acute Toxicity,	H225, H315, H317, H319, H330, H334,	P210, P261, P280, P284, P303+P361+P353, P308+P313
		Health Hazard	H335, H336, H351, H412	
FLEXANE BRUSHABLE HARD 216lb	1535 3	Flammable, Irritant, Health Hazard, Dangerous to the environment	H226, H319, H373, H411	P210, P260, P273, P280, P305+P351+P338, P314
Copper Acetyl Acetonate	1655	Irritant	H315, H319, H335	P261, P264, P280, P304+P340+P312
VP 250ML - (MA420 Black)	VP	Flammable, Irritant	H225, H315, H317, H335	P210, P261, P280, P303+P361+P353, P304+P340, P305+P351+P338
MA3940 5 GALLON PAIL ADHESIVE	IT504	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
MA3940 50 GAL ADH	IT503	Flammable, Irritant	H225, H315, H317, H319, H332, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313, P271
MA1025 50 GAL ADH	IT235	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313
FUTURA-PATCH 30052, WHITE	FC32 110K	Irritant	H302, H332	P264, P270, P261, P271
ULTRACHROME 1552 FOR 452 GAL	0155 2500 -T2	Flammable, Irritant, Health Hazard	H317, H332, H334, H226, H315, H319	P210, P280, P284, P303+P361+P353, P305+P351+P338, P312
MA8120 20L ACTIVATOR	8120 3	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P271, P280, P302+P352, P403+P235
MA320 ADHESIVE 20 LTR	3220 0	Flammable, Irritant	H225, H315, H317, H319, H335	P210, P261, P280, P303+P361+P353, P305+P351+P338, P333+P313

BYK A 530	8299	Health Hazard	H304, H412	P273, P301+P310
BYK 070	8298	Flammable, Health Hazard, Irritant	H226, H304, H319, H332, H335, H373	P210, P260, P280
TWEEN 20	8221	Non Hazardous	Not Classified	Not Classified

H.S. Titanium Dioxide VC10000M	1865	Not Classified	Not Classified	P270, P264, P271, P282, P301+P312, P305+P351+P338, P302+P352, P304+P312, P405, P273
Sodium EDTA	1832	Corrosive, Irritant	H302, H332, H318	P261, P264, P270, P271, P280, P301+P312, P304+P340, P305+P351
NOVATTANE 2100 ACTIVATOR 150L	1742	Health Hazard	H332, H351, H319, H335, H315, H334, H317, H373, H332	P261, P271, P201, P202, P281, P264, P280, P285, P272, P280
NOVATTANE 2100W ADHESIVE 150L	1741	Non Hazardous	Not Classified	Not Classified
NOVATTANE H-4110 ACTIVATOR 185	1740	Irritant, Dangerous to the environment	H315, H317, H319, H411	P261, P264, P280, P333+P313, P337+P313, P391
NOVATTANE H-4110 ADHESIVE 185L	1739	Corrosive, Irritant	H314, H317	P261, P280, P305+P351+P338+P310, P333+P313, P301+P330+P331+P310, P303+P361+P353+P310
Trigonox C 98%/TBUTYL PERBENZ	1621	Flammable, Irritant, Dangerous for the environment	H242, H315, H317, H332, H400, H412	P210, P220, P234, P235, P261, P264, P271, P272, P273, P280
Trigonox A-W70 (70%tbhp)	1619	Flammable, Acute Toxicity, Health Hazard, Corrosive, Irritant	H226, H242, H302, H311, H314, H317, H330, H341, H411	P201, P202, P210, P220, P233, P234, P240, P241, P242, P243, P260, P264, P270, P271, P272, P273, P280, P284

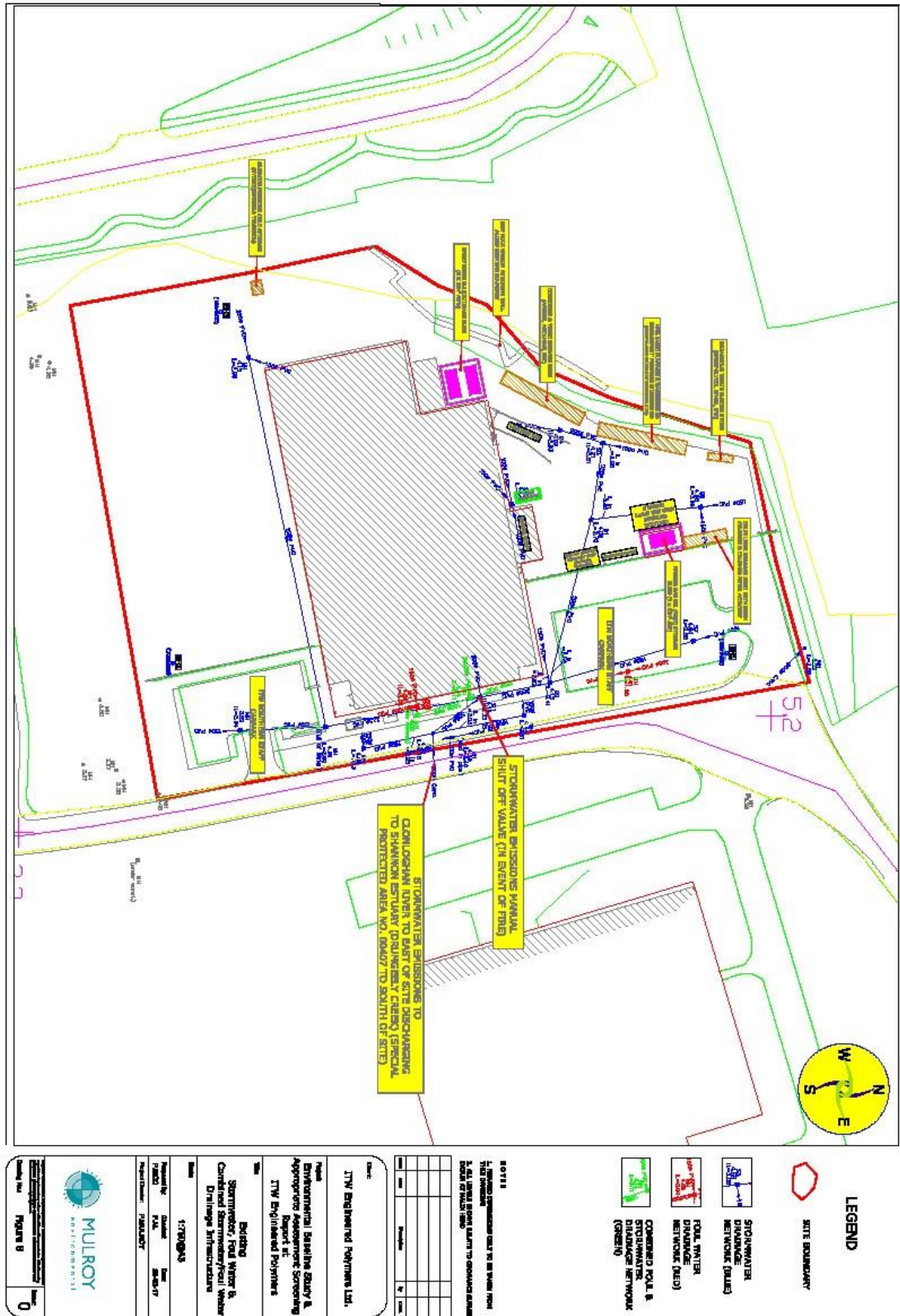
Santicizer 278	1617	Not Classified	Not Classified	Not Classified
TS340 Malaeic Acid Pellets	1600	Irritant, Dangerous for the environment	H302, H315, H319, H335, H411	P261, P264, P270, P271, P273, P280
CETEPOX 1410 NF H	1571	Corrosive, Irritant, Health Hazard, Dangerous	H312, H314, H318, H317, H361, H372, H411	P303+P361+P353, P305+P351+P338, P310, P405, P501

		to the environment		
CETEPOX 1940H		Irritant	H315, H319, H317	P261, P280, P305+P351+P338, P333+P313, P337+P313, P501
Alkanox 240	1375	Non Hazardous	Not Classified	Not Classified
Sartomer SR 313B	1285	Non Hazardous	Not Classified	Not Classified
Neoprene WHV-100	1280	Non Hazardous	Not Classified	Not Classified
CD550	1226	Corrosive, Irritant	H317, H318, H412	P261, P272, P273, P280, P302+P352, P305+P351+P338, P310, P333+P313
Kane Ace M521	1220	Non Hazardous	Not Classified	Not Classified
WHITE SPIRITS	1151	Flammable, Irritant, Harmful, Environmental Hazard	H226, H304, H336, H372, H411	P210, P260, P271, P301+P310, P501
Ethylene Glycol	1139	Irritant, Health Hazard	H302, H373	P260, P270, P280
DISTILLED WATER	1022	Non Hazardous	Not Classified	Not Classified

ANCAMINE 1638	8020 0102 5_1	Health Hazard, Corrosive, Acute Toxicity	H302, H330, H312, H314, H318, H317, H360F, H335, H318	P201, P260, P262, P264, P280, P284
IRON BLUE	VC3217 2	Not Classified	Not Classified	Not Classified
PARALOID™ BTA-753 ER IMPACT MODIFIER	1227 A	Not a hazardous substance	Not Classified	Not Classified
1-Dodecanol	8224	Irritant, Dangerous to the environment	H319, H410	P305+P351+P388
STA <sup>1</sup> -PUT SPH Contact Adhesive	TAFG 1.PD F	Flammable, Irritant, Health Hazard, Gas Cylinder	H225, H280, H315, H319, H335, H336, H351, H373	P201, P202, P210, P260, P264, P271, P280
AEROGLAZE 9947A	IR99 24AR M	Flammable, Irritant, Health Hazard, Dangerous to the environment	H225, H315, H319, H317, H341, H351, H360, H335, H336, H370, H371, H372, H400+H410	P210, P240, P241, P242, P243, P201, P202, P280, P281, P260, P264, P270, P271, P272, P273
AEROGLAZE 9947 B	IR99 24BR M	Flammable, Irritant	H225, H315, H319	P210, P233, P264, P280, P370+P378, P403+P235
DESMODUR 2460 M	8406	Health Hazard, Irritant	H315, H317, H319, H332, H334, H335, H351, H373	P260, P280, P302+P352, P304+P340, P305+P351+P338, P308+P313
DESMOPHEN 2061 BD	8407	Not Classified	Not Classified	Not Classified
PHILLYBOND #6 Hardener	Y004 4	Corrosive, Irritant, Health Hazard	H302+H332, H314, H317, H341	P261, P270, P280, P303+P361+P353, P305+P351+P338, P308+P313
WB S Component B	WB S Com pone nt B	Corrosive, Irritant	H332, H314, H317, H412	P261, P280, P303+P361+P353, P305+P351+P338, P312, P333+P313

WB S Component A	WB S Component A	Flammable, Irritant, Dangerous for the environment	H226, H315, H317, H319, H411	P210, P280, P303+P361+P353, P305+P351+P338, P333+P313
WB D Component B	WB D Component B	Corrosive, Irritant	H314, H317, H332, H412	P280, P303+P361+P353, P304+P340, P305+P351+P338
WB D Component A	WB D Component A	Irritant, Dangerous to the environment	H315, H317, H319, H411	P273, P280, P302+P352, P305+P351+P338, P333+P313

## Appendix 8 Drainage Map of the Facility



# Appendix 9 Chemical Storage Onsite

