SAFETY DATA SHEET

(According to Regulation (EC) No 1906/2006, Annex II,
as amended by Regulation (EU) No 453/2010)

Product Name: **DURA-SYSTEMS CLEANER**

Version No. 1	Issue Date: 1st June 2021	Revision Date: 1st June 2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	DURA-SYSTEMS CLEANER

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Chemical intermediate.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	The Garland Company UK Ltd Second Way Avonmouth Bristol BS11 8DF
Telephone	01174 401050
Website	www.garlandukltd.co.uk

1.4. Emergency telephone number

Emergency telephone	+44 01827 69662 (NOT 24HRS - 8am-5pm mon-fri)
Competent person email	trevor@rising-hsande.co.uk
National response centre	
Address	NHS Direct
Emergency telephone No	+44 (0)113 825 0000 or (UK) 111

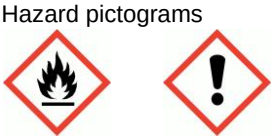
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 – H335
Environmental hazards	Not classified
Physicochemical	The product is highly flammable. Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
Precautionary statements	EUH204 Contains isocyanates. May produce an allergic reaction. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P281 Use personal protective equipment as required. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice/ attention. P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Methyl methacrylate

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Methyl methacrylate CAS number: 80-62-6	EC Number: 201-297-1	Reach index number: 607-035-00-6
Classification Flam. Liq. 2 – H225 Skin Irrit. 2 – H315 Skin Sens. 1 - H317 STOT SE 3 – H335		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Drink plenty of water and provide fresh air. Call for a doctor immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

General information	No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Foam, sand, CO_2, powder or water spray. Fight larger fire with alcohol resistant foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Exothermic polymerisation.
Hazardous combustion products	Hydrocarbons, carbon monoxide, carbon dioxide.

5.3. Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses. Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Cool endangered receptacles with water spray.
Special protective equipment	Wear self-contained respiratory protective device. suit. for firefighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from ignition sources. Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep away from heat, sparks and open flame. Keep container tightly closed. Keep only in the original container.
Storage class	Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters Occupational exposure limits

Methyl Methacrylate

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³

Ingredient comments	WEL = Workplace Exposure Limits

Methyl Methacrylate 80-62-6

DNEL

Workers - Inhalation; Long term systemic effects: 384.4 mg/m³

Workers - Dermal; Long term systemic effects: 13.67 mg/kg/day

PNEC

- Soil; 1.48 mg/kg/day
- STP; 10 mg/l
- Fresh water, Sediment; 10.2 mg/kg/day
- Fresh water; 0.94 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	The following protection should be worn: Tightly sealed goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Butyl rubber. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. For this substance the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 3). Frequent changes are recommended.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash contaminated clothing before reuse. Wash hands after handling. Eating, smoking and water fountains prohibited in immediate work area.
Respiratory protection	In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear a respirator fitted with the following cartridge: ABEK2-P3 Particulate filter, type P3.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colourless liquid.
Colour	Colourless.
Odour	Unpleasant.
Odour threshold	No information available.
pH	No information available.
Melting point	-48.2 °C
Initial boiling point and range	100 °C

Flash point	10 °C
Evaporation rate	Not determined.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Estimated value. : 1.1%-7%
Other flammability	No information available.
Vapour pressure	38.7 hPa @ 20°C
Vapour density	No information available.
Density	0.94 @ 20°C
Bulk density	No information available.
Solubility(ies)	1.6 g/l in water @ 20 °C
Partition coefficient	No information available.
Auto-ignition temperature	430 °C
Decomposition Temperature	No information available.
Viscosity	0.63 mPas @ 20 °C (Dynamic)
Explosive properties	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosive under the influence of a flame	No information available.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.

9.2. Other information

Particle size	No information available.
Volatility	Volatile.
Volatile organic compound	0.0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability: Possibility of exothermic polymerisation

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: Exothermic polymerisation

10.4. Conditions to avoid

Conditions to avoid: Keep away from heat and direct sunlight.

10.5. Incompatible materials

Materials to avoid: Peroxides and other radical forming substances.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects Acute toxicity - dermal

ATE dermal (mg/kg)	>5,000 mg/kg (rabbit)

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	29.8 (rat)

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	No information available.

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.

Carcinogenicity

Carcinogenicity	There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.
Reproductive toxicity development	This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.

Aspiration hazard

Aspiration hazard	Classification not possible.

SECTION 12: Ecological information

12.1. Toxicity

Ecological information on ingredients.

Acute aquatic toxicity

Acute toxicity - fish	, 48 hours: > 1-10 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 69 mg/l, Daphnia magna

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility	No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB	No information available

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1247
UN No. (IMDG)	1247
UN No. (ICAO)	1247
UN No. (ADN)	1247

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	METHYL METHACRYLATE MONOMER, STABILIZED
Proper shipping name (IMDG)	METHYL METHACRYLATE MONOMER, STABILIZED
Proper shipping name (ICAO)	METHYL METHACRYLATE MONOMER, STABILIZED
Proper shipping name (ADN)	METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels

14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Hazard Identification Number (ADR/RID)	339

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Hazard statements in full	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H330 Fatal if inhaled. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer by inhalation. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.
Store Between	Store Between 5'c - 25'c

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