Safety Data Sheet

Hazardous, Dangerous Goods SDS 460

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Duracon/Matacryl Catalyst

Recommended use: Catalyst for Duracon/Matacryl Systems

Supplier: Equus Industries Ltd
Company No.:
Street Address: Sheffield Street, Riverlands
PO Box 601
Blenheim
Telephone: +64 3 578 0214
Email: info@equus.nz

Emergency Telephone number: **National Poisons Centre 0800 764 766**

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of EPA New Zealand GHS 7.

EPA Group Standard: HSR002629 - Organic Peroxides Group Standard 2020

Signal Word
Danger

Hazard Classifications
Organic Peroxides - Type D
Serious Eye Irritation - Category 2
Sensitisation - Skin - Category 1
Toxic to Reproduction - Category 2
Acute Hazard to the Aquatic Environment - Category 1
Long Term Hazards to the Aquatic Environment - Category 1

Hazard Statements

H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child .
H410	Very toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220	Keep/Store away from clothing/combustible materials/(insert appropriate material).
P234	Keep only in original packaging.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P264	Wash hands, face and all exposed skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

P273	Avoid release to the environment.
P281	Use personal protective equipment as required.

Response Precautionary Statements

P101	If medical advice is needed, have product container or label at hand.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see on product label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Storage Precautionary Statements

P405	Store locked up.
P410	Protect from sunlight.
P411+P235	Store at temperatures not exceeding XX °C/ YY °F. Keep cool.
P420	Store separately.

Disposal Precautionary Statement

P501	Dispose of contents/container in accordance with local, regional, national and international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 5.2

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Peroxide, dibenzoyl	94-36-0	40-50 %
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	84-61-7	40-50 %
Ingredients determined to be Non-Hazardous		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs

seek medical assistance.

Eye contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber, neoprene should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Hazchem Code: 1WE

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Heating may cause a fire.

Fire fighting further advice: Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Ensure adequate ventilation. Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before disposal. Pick up mechanically, collect in a suitable receptacle and dispose in accordance with government regulations

LARGE SPILLS
Ensure adequate ventilation. Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before disposal. Pick up mechanically, collect in a suitable receptacle and dispose in accordance with government regulations

Dangerous Goods - Initial Emergency Response Guide No: 145

7. HANDLING AND STORAGE

Handling: Keep away from heat and direct sunlight.Open and handle receptacle with care.Prevent formation of dust.Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.Do not refill residue into storage receptacles.Restrict the quantity stored at the work place.Before break and at the end of work hands should be thoroughly washed.Only use tools made of suitable materials (e. g. polyethylene or stainless steel).Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).Oxidizing because of releasing oxygen.While using do not eat, drink or smoke.Do not generate flames or sparks.Keep product and emptied container away from heat and sources of

ignition.Avoid shock and friction.Take precautionary measures against static discharges.Do not smoke.Information about fire – and explosion protection:Protect from heat.Protect against electrostatic charges.Prevent impact and friction.Use explosion-proof apparatus / fittings and spark-proof tools.Dust can combine with air to form an explosive mixture.Substance/product is oxidising when dry.Product is not explosive. However, formation of explosive air/dust mixtures are possible.Avoid open flames, sparks, direct sunlight and other sources of ignition. Keep ignition sources away - Do not smoke.

Storage: Storage: - Pay attention to the special requirements of your local authorities for storing dangerous goods.Requirements to be met by storerooms and receptacles:- Store only in the original receptacle.- Prevent any seepage into the ground.- Use only receptacles specifically permitted for this substance/product.Information about storage in one common storage facility:- Do not store or park organic peroxide together with heavy metal compounds and amines.- Store away from foodstuffs, drinks and feeding stuffs.Further information about storage conditions:- Keep container tightly sealed.- Protect from heat and direct sunlight.- Protect from contamination.- Storage in a collecting room is required.· Recommended storage Temperature (To maintain quality):- max.: +30 °C

This material is classified as a Division 5.2 Organic Peroxide as per the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and/or the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Benzoyl peroxide		5			dsen
Dicyclohexyl phthalate		5			

As published by WorkSafe New Zealand.

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

ppm Parts of vapour or gas per million of air by volume.

mg/m3 Milligrams of substance per cubic metre of air.

sen Sensitiser.

dsen Dermal sensitiser.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not

exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. When using this material, use explosive dust handling controls to minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks and flame; prevent the build-up of static charges with appropriate earthing of equipment and personnel.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES, RESPIRATOR.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber, neoprene should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

RECOMMENDATIONS FOR CONSUMER USE:
The usual precautionary measures are to be adhered to when handling chemicals.Keep away from foodstuffs, beverages and feed.Immediately remove all soiled and contaminated clothingWash hands before breaks and at the end of work.Store protective clothing separately.Avoid close or long term contact with the skin.Avoid contact with the eyes and skin.Do not eat, drink, smoke or sniff while working.Use skin protection cream for skin protection.Be sure to clean skin thoroughly after work and before breaks.Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated. Only use chemical-protective gloves with CE-labelling of category III.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Base Units:	Kilogram
Form:	Powder
Colour:	Whitish
Odour:	Characteristic

Solubility:	Undetermined
Density:	1.23 g/cm³
Relative Vapour Density (air=1):	Not Applicable
Flash Point (°C):	Not Applicable
Explosion/Flammability Limits:	Not determined
Autoignition Temperature (°C):	Product is not selfigniting
Melting Point/Range (°C):	Not Applicable
Boiling Point/Range (°C):	Not Applicable
Decomposition Point (°C):	+60 (SADT)
pH:	Not Applicable
Viscosity:	Not Applicable
Explosive properties:	Product is not explosive. However, formation of explosive air/dust mixtures are possible.

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: · Thermal decomposition / conditions to be avoided:SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which self accelerating decomposition may occur with substance in the packaging as used in transport. A dangerous self accelerating decomposition reaction and, under certain circumstances, explosion or fire can be cause decomposition at and above the temperature. Contact with incompatible substances can cause decomposition at or below the SADT.

Conditions to avoid: No further relevant information available

Incompatible materials: Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metalcompounds and amines).

Hazardous decomposition products: Hydrocarbons, carbon dioxide and -monoxide.No hazardous decomposition products if used and stored according to specifications.Additional information:Emergency procedures will vary depending on conditions. The customer should have an emergency response plane in place

Hazardous reactions: Self-accelerating decomposition at SADT.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: May cause an allergic skin reaction. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: Causes serious eye irritation. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): LC_{50} > 5.0 mg/L for dust.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): LD_{50} > 2,000 mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): LD_{50} > 2,000 mg/Kg bw

dibenzoyl peroxide LD50 (Rat): >5,000mg/kg (Method: Oral)
dicyclohexyl phthlate LD50 (Rat): >2,000mg/kg (Method: Oral)

Corrosion/Irritancy: Eye: this material has been classified as a Category 2 Hazard (reversible effects to eyes). Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as a Category 2 - Substances that are suspected human reproductive or developmental toxicants.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 1 Hazard. Acute toxicity estimate (based on ingredients): ≤ 1 mg/L

dibenzoyl peroxide 48hr EC50 (Daphnia magna): 110 mg/l
dibenzoyl peroxide 72hr EC50 (algae): 0.0711 mg/l
dibenzoyl peroxide 96hr LC50 (rainbow trout): 0.0602 mg/l

Chronic aquatic hazard: This material has been classified as a Category Chronic 1 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): <1 mg/L, where the substance is not rapidly degradable and/or BCF ≥ 500 and/or log K_{ow} ≥ 4.

Ecotoxicity in the soil environment: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial vertebrates: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: · Ecotoxical effects:· Remark: Very toxic for fish· Additional ecological information:- General notes: Also poisonous for fish and plankton in water bodies.- Very toxic for aquatic organisms- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water- Do not allow product to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

After diluting with a suitable inert solid material to 10 %, the product must be supplied to a special treatment (e. g. thermal utilization) under observance of all official regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system. This material and its container must be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No:	3106
Dangerous Goods Class:	5.2
Packing Group:	None
Hazchem Code:	1WE
Emergency Response Guide No:	145
Limited Quantities	500 g
Proper Shipping Name:	ORGANIC PEROXIDE TYPE D, SOLID

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), non-flammable non-toxic gases (Class 2.2), toxic gases (Class 2.3), flammable liquids (Class 3), flammable solids (Class 4.1), spontaneously combustible substances (Class 4.2), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), radioactive substances (Class 7), corrosive substances (Class 8), fire risk substances or combustible liquids. Also note that fire risk substances including dangerous goods of Class 6 or Class 9 which are fire risk substances are incompatible with dangerous goods of Class 1, Class 5.1 and Class 5.2. Exemptions may apply.

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No:	3106
Dangerous Goods Class:	5.2
Packing Group:	None
Limited Quantities:	500 g
Proper Shipping Name:	ORGANIC PEROXIDE TYPE D, SOLID

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No:	3106
Dangerous Goods Class:	5.2
Packing Group:	None
Limited Quantities:	-
Proper Shipping Name:	ORGANIC PEROXIDE TYPE D, SOLID

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:
Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
Basel Convention (Hazardous Waste)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

EPA Group Standard: HSR002629 - Organic Peroxides Group Standard 2020

16. OTHER INFORMATION

Reason for issue:

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.