



Safety Data Sheet PRO-CAT Catalyst

Updated March 2021

1. Identification of the Material and Supplier

Product Name:	PRO-CAT Catalyst
Product Code:	PRO-CAT
UN Number:	3105
DG Class:	5.2D
Shipping Name:	Organic Peroxide Type D, Liquid, (t-Butyl Perbenzoate)
Packaging Group:	-
Hazchem Code:	2WE
Uses:	Industrial and Professional use only
Company:	H S Composites
Address:	63 Hunua Road, Papakura, Auckland 2110
Telephone:	+64 (09) 295 2200
Email:	sales@hscomposites.co.nz
Website:	www.hscomposites.co.nz

2. Hazard Identification

Regulatory Information Classified as Hazardous according to Organic Peroxides, Toxic (6.1) Corrosive Group Standard 2017

HSNO Approval Number HSR001631

Dangerous Goods Class 5.2D

Hazardous Classifications

Flammable Liquid	Category 4
Organic Peroxide	Type D
Acutely Toxic (Oral)	Category 5
Acutely Toxic (Inhalation)	Category 4
Skin Corrosion/Irritant	Category 1B
Skin Sensitisation	Category 1
Eye Damage/Eye Irritation	Category 1

Aquatic Toxicity (Chronic)	Category 1
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Pictograms:

Signal Word: **Danger**

H227	Combustible Liquid
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HEALTH HAZARDS:

H227	Combustible Liquid
H242	Heating may cause a fire
H302	Harmful if Swallowed
H313	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes severe eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation

ENVIRONMENT HAZARDS:

H410	Very Toxic to Aquatic life
H412	Harmful to Aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS: Preventions

P102	Keep out of reach of Children
P103	Read Label/SDS before use
P201	Obtain instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flame/hot surfaces. No smoking.
P220	Store away from clothing, food, drink, animal foodstuffs, combustible materials
P234	Store/keep in original containers only
P260	Do not breath dust/fume/gas/mist/vapours/spray
P264	Wash hands and exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated clothing should not be allowed out of the workplace
P273	Avoid release into the environment
P280	Wear protective clothing, gloves and eye protection

P281	Use personal protective equipment as required
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PERSONAL PROTECTION EQUIPMENT:**RESPONSE:**

P101	If medical advice is needed, have product container or label at hand
P301 + P312	If swallowed call POISON CENTRE 0800 764 766
P330	Rinse out mouth, do not swallow
P302 + P352	If on skin, wash with plenty of soap and water
P332 + P313	If skin irritation occurs, get medical advice
P362	Take off contaminated clothing and wash before reuse
P304 + P340	If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing
P305 + P351	If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, continue to rinse
P337 + P313	If eye irritation persists seek medical advice
P308 + P313	If exposed or concerned seek medical advice
P314	Get medical advice if you feel unwell
P370 + P378	In case of fire use water fog, foam, dry chemical or carbon dioxide (CO ₂) to extinguish. DO NOT USE water jet (this will only spread the fire)
P391	Collect any spillage
P330+310	IF SWALLOWED: Rinse out mouth, do not swallow water, DO NOT induce vomiting. Call Poisons Centre immediately

STORAGE:

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P235	Keep cool. Store below 30°C
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P405	Store in a locked area

DISPOSAL:

P501	Dispose of product and packaging in accordance with local and Governmental regulations or through an approved waste disposal plant.
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Dangerous Goods Classification 5.2

Packing Group -

Hazchem Code 2WE

3. Composition / Information on Ingredients

Component	Cas No	Proportion
t-Butyl Per benzoate	614-45-9	30 - <60%
Acetyl Acetone Peroxide	37187-22-7	30 - <60%
Acetylacetone	123-54-6	10 - <20%
Hydrogen Peroxide	7722-84-1	1 - <2.5%
Non-Hazardous Ingredients	-	Balance

4. First Aid

For advice, contact the National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor, show Doctor in attendance a copy of this SDS.

Inhalation: Move the person to fresh air immediately. Keep warm and at rest until recovered. Get medical advice if person feels unwell or is concerned.

Begin artificial respiration if breathing has stopped and get immediate medical assistance.

Swallowed: If swallowed, DO NOT induce vomiting. Rinse mouth. **Get immediate medical advice.** Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain immediate medical attention

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If skin irritation occurs, get medical advice. Wash contaminated clothing before re-use.

Eye Contact: Hold eyelids apart and flush the eye continuously with running water for 15 minutes. Remove contact lenses after 5 minutes if present, and easy to do. Continue flushing. Get immediate medical attention if irritation persists.

First Aid facilities: Provide eye baths and safety showers close to areas where splashing may occur.

Note to Doctor/Physician: Treat symptomatically. **Show Dr this Safety Data Sheet.**

5. Fire Fighting Measures

Flammable liquids and vapours: Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media: Water spray or fog, Carbon dioxide (CO₂), foam or dry chemical.

DO NOT use Jetstream of water.

Hazards from combustion products: Smoke, fume, carbon dioxide and carbon monoxide and incomplete combustion products.

Precautions for fire fighters and special protective equipment: Full protective clothing and self-contained breathing apparatus.

Hazchem Code: **2WE**

Flammable liquid and vapour. Vapour/Air mixture may ignite explosively. Flash back along vapour trail may occur. Run off into drains or sewer may create a fire or explosion hazard.

SPECIAL FIREFIGHTING PROCEDURES.

Wear full protective clothing and self-contained breathing apparatus in positive pressure mode, in case of fire the product may be violently or explosively reactive. Use water spray to disperse the vapours. Prevent product and vapours from entering drains/sewers/water courses.

6. Accidental Release Measures

Steps to be taken if the material is released or spilled.

Evacuate personnel to a safe area. **Use required protective equipment.** Ensure adequate ventilation in area. Make sure there is no risk to self or personnel.

Eliminate all sources of ignition (flames, hot surfaces, electrical, static or frictional sparks, no smoking). Then ventilate the area.

Contain the area of spillage and pump material into drums for use or disposal. Absorb remainder on sand or perlite and place the saturated absorbent into closed containers and label for disposal. Use spark resistant tools.

Prevent contamination of storm-water drains and waterways. Should there be waterway or sewer contamination advise fire Service and local authority urgently.

Contaminated absorbent inert material (such as sand) to be disposed of in accordance with appropriate local or governmental regulations.

Correctly label all material containers to be disposed of.

Liquid material mixed with peroxide initiators should be allowed to gel and cool before disposal as solid waste in accordance with appropriate local or national regulations.

7. Storage and Handling

Use Personal Protection when entering storage areas. Avoid inhalation of vapour and contact with skin, eyes and clothing. Launder contaminated clothing before re-use, wash skin with soapy water. Wash hands thoroughly before eating.

This product is flammable, do not open near open flame, sources of heat or ignition, NO SMOKING.

Store in a locked and bunded area or approved flammable goods store away from direct heat (ideally below 30°C to prevent spoilage). Keep containers closed when not in use. Open container slowly in case of internal pressure. Isolate from all potential sources of ignition including flames and electrical sparks.

Store separate from all other materials in a separate bunker/area for MEKP only, keep cool, dry and away from acids, amines and heavy metal compounds.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Limits: Worksafe November 2020

Hydrogen Peroxide (CAS# 7722-84-1) STEL 1 ppm

General Use: This product is hazardous and should be used with a local exhaust ventilation to maintain vapour/dust concentration below WES level. If concentrations exceed exposure limit use organic vapour canister mask or approved air-line mask to maintain workshop limits.

Skin Protection: Wear overalls or other work clothing providing arm and leg cover. Use protective gloves (Latex or Nitrile). Use antistatic footwear.

Eye Protection: Safety goggles or splash mask.

Environmental Control: Prevent from entering into sewer, stormwater or waterways.



9. Physical / Chemical Properties

Physical Description & colour:	Light Yellow liquid.
Odour:	Pungent odour.
Boiling Point:	N/A
Flammable Liquid Flash Point:	68°C
Flammable Limits:	LEL (lower explosive limit) N/A UEL (upper explosive limit) N/A
Relative Density:	1.04
Vapour Density:	Not available
Decomposition Temperature:	80°C
Water Solubility:	Insoluble
Active Oxygen Content:	N/A

10. Stability and Reactivity

Stability:	Stable under normal storage and handling conditions.
Conditions to avoid:	Exposure to sunlight, open flames and other sources of ignition.
Materials to avoid:	Not classified as an oxidising agent. Thermal decomposition may result in the release of toxic and/or irritating fumes carbon monoxide, carbon dioxide and various organic
Hazardous Reaction:	At high temperature thermal decomposition will occur giving off toxic products such as methane, ethane, ethylene and carbon monoxide. Keep at temperature above -10°C (Risk of precipitation)

Storage temperature not exceeding 30°C.

11. Toxicological Information

When used under properly controlled conditions, within workplace exposure limits and with adequate ventilation and protective equipment, no adverse health effects are to be expected.

Acute effects of over exposure.

If Swallowed: Harmful by ingestion and may cause irritation to the mouth, throat, oesophagus with symptoms of nausea, vomiting and gastric disturbance.

Eye Contact: Corrosive to eyes and causes burns. Serious irritation. Tearing, stinging, blurred vision and redness will occur. Wash with water immediately and continue for 15 minutes, seek medical help immediately.

Skin Contact: This product is corrosive to the skin.

Inhalation of Vapour: May cause headaches, nausea, may cause burns to the nose, throat and respiratory system.

12. Ecological Data

Prevent the product from entering storm-water drains, sewers or waterways.

Toxic to Aquatic life with long term effects.

Harmful to terrestrial vertebrates.

Will degrade over time up to 87% after 28 days.

H410	Very Toxic to Aquatic life
H412	Harmful to Aquatic life with long lasting effects

13. Disposal Considerations

P501	Dispose of product and packaging in accordance with local regulations or through an approved waste disposal plant.
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Empty containers may contain flammable residues/vapours, keep away from sources of ignition.

Dangerous Goods Classification 5.2

Packing Group

Hazchem Code 2WE

14. Transport Information

UN Number:	UN3105
Proper Shipping Name:	Organic Peroxide Type D (liquid) Methyl Ethyl Ketone Peroxide
Hazchem Code:	2WE
Dangerous Goods Class:	Class 5.2
Packing Group:	
Marine Pollutant:	Yes
Special Precautions for users:	122, 274, 323
ERG Code	145
IERG Code	32

DO NOT LOAD WITH – Explosives, toxic gases, heavy metals, spontaneously combustible substances, oxidisers or organic peroxides.

15. Regulatory Information

EPA New Zealand HSNO approval code HSR001631, Organic Peroxides Corrosive Group Standard Group standard 2020.

SDS To be available within 10 minutes when required.

16. Other Information

This SDS contains only safety-related information. For other data see product information literature.

Group Standard	October 2020
LEL	Lower explosive limit
UEL	Upper explosive limit
TWA	Time weighted average over 8 hr working day
STEL	Short term expose limit
Cas #	Unique registered number for chemicals
ppm	parts per million
UN number	Individual number assigned to hazardous materials
EMS	Emergency response for shipping
ERG	Emergency code for first responders
Other References	Supplier SDS's

Review: March 2021

Reason: Updates and pictograms

Disclaimer: The information given in this safety data sheet is given in good faith and is believed to be valid and accurate at the time of publication. However, no responsibility is accepted for accident or injury which may occur from omissions or from information contained in the data sheet.

HS Composites 03/21