

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20001	Gorilla H2 Solvent		Clear

Recommended use:	Solvent	
HSNO Group Standard	HSR002650	
UN number, shipping name and packaging group:	UN1993 Flammable Liquid, N.O.S.	
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	14 Avalon Drive	Phone: (07) 847 5540
	Nawton	Fax: (07) 847 0324
	Hamilton 3200	Email: sales@soudal.co.nz
	New Zealand	Website: www.soudal.co.nz
POISON CENTRE NUMBER: 0800 764 766 (24 hours)		

Section 2 Hazards Identification

Statement of Hazardous Nature

This product is classified as:

HAZARDOUS SUBSTANCE according to the criteria of HSNO.

REGULATED under NZS5433:2020 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification	GHS Hazard statements
Flammable Liquid Category 2	H225 Highly flammable liquid and vapour
Acute Oral Toxicity Category 4	H302 Harmful if swallowed
Skin Effects Category 2	H315 Causes skin irritation
Eye Effects Category 2	H319 Causes serious eye irritation
Reproductive Toxicity Category 2	H361 Suspected of damaging fertility or the unborn child
STOT – SE Category 1	H370 Causes damage to organs
STOT – RE Category 1	H372 Causes damage to organs through prolonged or repeated exposure
Aspiration Category 1	H304 May be fatal if swallowed and enters airways
Chronic Aquatic Hazard Category 2	H411 Toxic to aquatic life with long lasting effects

HSNO Signal Word:

DANGER



Precautionary Statements:

Keep out of reach of children

Ensure all safety directions are read and understood before use

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking

P240 Ground and bond container and receiving equipment
P241 Use explosion proof electrical/ lighting/ ventilating/ intrinsically safe equipment

P242 Use non-sparking tools
P243 Take action to prevent static discharges

P260	Do not breathe mist/ vapours/ sprays	P391	Collect spillage
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection	P405	Store locked up
P264	Wash all exposed external body areas thoroughly after handling	P403+P235	Store in a well-ventilated place. Keep cool
P270	Do not eat, drink or smoke when using this product	P501	Dispose of contents/ container to authorised hazardous or special waste collection point in accordance with any local regulation
P273	Avoid release to the environment		

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Hexane	110-54-3	Flammable Liquid Category 2; Eye Effects Category 2 STOT – SE Category 1; STOT – RE Category 1; Chronic Aquatic Hazard Category 2	< 60
Acetone	67-64-1	Flammable Liquid Category 2; Eye Effects Category 2	< 60
Toluene	108-88-3	Flammable Liquid Category 2; Acute Oral Toxicity Category 4; Acute Inhalation Toxicity Category 4; Skin Effects Category 2; Eye Effects Category 2; Reproductive Toxicity Category 2; STOT – SE Category 2; STOT – RE Category 2; Chronic Aquatic Hazard Category 4	< 30
Ingredients not contributing to the classification			balance

Section 4 First Aid Measures⁷⁴

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Eye contact:

Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation:

remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.

Ingestion:

remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.

General advice and advice for physicians:

Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media:

Foam; Water spray, dry chemical or CO₂

Fire Incompatibility:

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special hazards due to combustion:

Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 Accidental Release Measures

Minor Spills

Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

Major Spills

Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

Section 7 Handling and Storage

Handling:

Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically. Always release caps or seals slowly to ensure slow dissipation of vapours. Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging or handling operations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights, heat or ignition sources. When handling, DO NOT eat, drink or smoke. Vapour may ignite on pumping or pouring due to static electricity. DO NOT use plastic buckets. Earth and secure metal containers when dispensing or pouring product. Use spark-free tools when handling. Avoid contact with incompatible materials. Keep containers securely sealed. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. DO NOT allow clothing wet with material to stay in contact with skin.

Storage:

Store in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed. Store away from incompatible materials in a cool, dry well-ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Suitable Container:

Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks. For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.

Section 8 Exposure Controls/Personal Protection

Exposure Limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
110-54-3	Hexane	72 mg/m ³	
67-64-1	Acetone	1185 mg/m ³	2375 mg/m ³
108-88-3	Toluene	188 mg/m ³	

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.




Engineering Controls:

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. For flammable liquids and

SAFETY DATASHEET

flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Exposure controls:

Control	Protective measure
Eye	Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [AS/NZS 1336 or national equivalent] Close fitting gas tight goggles 
Respiratory	Not normally required. Where inadequate ventilation exists then a Type AX filter is recommended 
Skin	Nitrile+PVC gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing. 

Section 9 Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Clear liquid
Odour	Aromatic hydrocarbon
pH	No data
Vapour pressure	No data
Viscosity	No data
Vapour Density	3
Boiling Point	No data °C
Volatile materials	100 %
Freezing/melting point	No data
Solubility	Immiscible
Specific gravity/density	0.75 – 0.85 g/ml
Flash point	-15 °C
Danger of explosion	Not applicable
Auto-ignition temperature	485 °C
Upper and lower flammability limits	LEL 1.2 % UEL 8.0 %
Evaporation Rate	> 1 Butyl acetate = 1
Corrosiveness	No data

Section 10 Stability and Reactivity

Stability:

Stable under normal conditions.

Conditions to avoid:

Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes. Contact with water may release flammable gases.

Incompatible materials to avoid:

Avoid oxidising agents, strong acids and strong bases.

Hazardous decomposition products:

Combustion will result in the release of carbon monoxide (CO), carbon dioxide (CO₂); and pyrolysis products typical of burning organic material. May emit corrosive fumes.

Section 11 Toxicological Information

Test	Data and symptoms of exposure
Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Effects of exposure to acetone by inhalation include central nervous system depression, light-headedness, unintelligible speech, incoordination, stupor, low blood pressure, fast heart rate, metabolic acidosis, high blood sugar and ketosis. Rarely, there may be convulsions and death of kidney tubules. Ketone vapours irritate the nose, throat and mucous membrane. High concentrations depress the central nervous system, causing headache, vertigo, poor concentration, sleep and failure of the heart and breathing.
Oral	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence
Dermal	The liquid may be able to be mixed with fats or oils and may decrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood-stream through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The material may accentuate any pre-existing dermatitis condition
Eye	There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC ₅₀ mg/L
Hexane	5000	>2000	48000 ppm/4h
Acetone	1738	20	44 / 4h
Toluene	636	>5000	12.5 /4h

Section 12 Ecological Information

Summary of Ecotoxicity

Toxic to aquatic life with long lasting effects. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. DO NOT discharge into sewer or waterways.

	Fish mg/L	Crustacea mg/L	Algae mg/L
Hexane			EC _{50 240hr} >25.023
Acetone	LC _{50 96hr} >100 NOEC _{48hr} 0.001	EC _{50 48hr} 6098	EC _{50 96hr} 9.873
Toluene	LC _{50 96hr} 5	EC _{50 48hr} 3.78 NOEC _{504hr} 0.74	EC _{50 96hr} >376

	Persistence H ₂ O/ Soil	Persistence Air	Bioaccumulation	Mobility
Hexane	LOW	LOW	MEDIUM	LOW
Acetone	LOW	MEDIUM	LOW	HIGH
Toluene	LOW	LOW	LOW	LOW

Section 13 Disposal Considerations

Disposal methods:

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled. The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. Only dispose to the environment if a tolerable exposure limit has been set for the substance. Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility. Burning the hazardous substance must happen under controlled conditions with no person or place exposed to (1) a blast overpressure of more than 9 kPa; or (2) an unsafe level of heat radiation. The disposed hazardous substance must not come into contact with class 1 or 5 substances.

Section 14 Transport Information



HAZCHEM

3YE

Land Transport UNDG

Class or division **3**
 Subsidiary Risk
 UN Number **1993**
 UN Packing Group **II**
 Environmental hazard **Environmentally hazardous**
 Shipping Name **Flammable Liquid N.O.S.**
 Special Provisions **274**
 Limited Quantities **1 L**

Air Transport IATA

ICAO/IATA Class **3**

ICAO/IATA Subrisk
 UN/ID Number **1993**
 ERG Code **3H**
 Packing Group **II**
 Environmental hazard **Environmentally hazardous**
 Special provision **A3**
 Cargo only
 Packing instructions **364**
 Maximum Qty/pack **60 Lt**
 Passenger and Cargo
 Packing instructions **353**
 Maximum Qty/pack **5 Lt**
 Passenger & Cargo Limited Quantity
 Packing instructions **Y341**
 Maximum Qty/pack **1 L**
 Shipping Name **Flammable Liquid N.O.S.**

Marine Transport IMDG
 IMDG Class **3**
 IMDG Subrisk
 UN Number **1993**
 UN Packing Group **II**
 Environmental hazard **Marine Pollutant**
 EmS Number **F-E S-E**
 Special provisions **274**
 Limited quantities **1 L**
 Shipping Name **Flammable Liquid N.O.S.**

Section 15 Regulatory Information

HSNO approval number and Group Standard:

HSR002650

Solvents Flammable

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when present in quantities >100 Lt.
Certified Handler	Not required
Tracking	Not required
Bundling and secondary containment	Based on total volumes and pack sizes held on site
Signage	Required when present in quantities >100 Lt
Location Compliance certificate	Flammable Liquid Category 2 required when quantities exceed 100Lt when in closed containers of greater than 5L capacity and/or when quantities exceed 250Lt when in closed containers of less than 5Lt capacity and/or quantities exceed 50Lt in open containers
Hazardous Atmosphere Zone	Required to meet the requirements of AS/NZS60079.10
Fire extinguisher	2x required when quantities exceed 250 Lt

National Inventories

Y = All ingredients are on the inventory

Australia	AICS	Y
Canada	DSL	Y
Canada	NDSL	N
China	IECSC	Y
Europe	EINEC/ELINCS/NLP	Y
Japan	ENCS	Y
Korea	KECI	Y
New Zealand	NZIOC	Y
Philippines	PICCS	Y

USA	TSCA	Y
Taiwan	TCSI	Y
Mexico	INSQ	Y
Vietnam	NCI	Y
Russia	ARIPS	Y
Thailand	TECI	Y

Section 16 Other Information

Revision History:

August 2021	Review and update to GHS v7 format
May 2016	Initial preparation

Abbreviations:

Abbreviation	Description
CAS number	Number assigned to chemical in the Chemical Abstracts Service registry
HAZCHEM code	Code used by fire-fighters to determine correct method of action in the case of fire
HSNO	Hazardous Substances and New Organisms (Act)
ICAO Technical Instructions	International Civil Aviation Organization Technical Instructions
IMDG code	International Maritime Dangerous Goods code controlled by the International Maritime Organization (IMO)
LC ₅₀	Lethal concentration 50% - concentration fatal to 50% of the tested population
LD ₅₀	Lethal dose 50% - dose fatal to 50% of the tested population
NZS 5433	New Zealand Standard 5433 (Standard for the Transport of Dangerous Goods on Land)
SDS	Safety data sheet
STEL	Short term exposure limit
TWA	Time weighted average (typically measured as 8 hours)
UN number	United nations number
WES	Workplace exposure standard

References

Chemical properties and HSNO classifications derived from the New Zealand chemical classification information database (CCID). www.epa.govt.nz
 Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 12-1 Edition.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.

This SDS was prepared by Collievale Enterprises Ltd in accord with the Hazardous Substances (Safety Data Sheets) Notice 2017
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End of SDS