

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Jeffries CulChar
Synonyms	Jeffries CulChar, Jeffries Organic Fertiliser
Other means of identification	Not Available

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

Relevant identified uses	Organic fertiliser and plant nutrients

Details of the supplier of the safety data sheet

Registered company name	Jeffries Group
Address	412 Hanson Road North Wingfield South Australia 5013
	Australia
Telephone	+61 8 8368 3588
Fax	+61 8 8368 3588
Website	www.jeffries.com.au
Email	info@jeffries.com.au

Emergency telephone number

Association / Organisation Not	Chemwatch
Available	
Emergency telephone	Australia: +61 1800 951 288 (Toll Free – 24x7)
numbers	New Zealand: +64 800 700 112 (Toll Free – 24x7)
Other emergency telephone	+61 8 8368 3555 (Business Hours)
numbers	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
Classification [1]	Not Applicable

Label elements

Hazard pictogram(s)	Not Applicable
SIGNAL WORD	NOT APPLICABLE

Hazard statement(s) Not Applicable

Precautionary statement(s) Prevention Not Applicable

Precautionary statement(s) Response Not Applicable

Precautionary statement(s) Storage Not Applicable

Precautionary statement(s) Disposal Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	100	Ingredients determined not to be hazardous

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes:
	- Wash out immediately with water.
	 If irritation continues, seek medical attention.
	 Removal of contact lenses after an eye injury should only be
	undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs:
	 Flush skin and hair with running water (and soap if available).
	 Seek medical attention in event of irritation.
Inhalation	- If fumes, aerosols or combustion products are inhaled remove from
	contaminated area.
	 Other measures are usually unnecessary.
Ingestion	- Immediately give a glass of water.
	 First aid is not generally required. If in doubt, contact a Poisons
	Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.	
----------------------------------	--

Advice for firefighters

Fire Fighting	- Alert Fire Brigade and tell them location and nature of hazard.
	- Wear breathing apparatus plus protective gloves in the event of a
	fire.
	 Prevent, by any means available, spillage from entering drains or water courses.
	 Use fire fighting procedures suitable for surrounding area.
	 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.
	 Equipment should be thoroughly decontaminated after use.
Fire / Explosion	- Non-combustible.
Hazard	- Not considered a significant fire risk, however containers may burn.
HAZCHEM	Not Applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	- Clean up all spills immediately.
	 Avoid contact with skin and eyes.
	 Wear impervious gloves and safety glasses.
	 Use dry clean up procedures and avoid generating dust.
	 Vacuum up (consider explosion-proof machines designed to be
	grounded during storage and use).
	- Do NOT use air hoses for cleaning.
	- Place spilled material in clean, dry, sealable, labelled container.
Major Spills	- Clear area of personnel and move upwind.
	 Alert Fire Brigade and tell them location and nature of hazard.
	 Control personal contact with the substance, by using protective
	equipment and dust respirator.
	 Prevent spillage from entering drains, sewers or water courses.

Avoid generating dust.
 Sweep, shovel up. Recover product wherever possible.
 Put residues in labelled plastic bags or other containers for disposal.
 If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	- Limit all unnecessary personal contact.
	 Wear protective clothing when risk of exposure occurs.
	- Use in a well-ventilated area.
	 Avoid contact with incompatible materials.
	- When handling, DO NOT eat, drink or smoke.
	 Keep containers securely sealed when not in use.
	 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 are
	maintained.
Other information	- Store in original containers.
	- Keep containers securely sealed.
	- Store in a cool, dry area protected from environmental extremes.
	- Store away from incompatible materials and foodstuff containers.
	 Protect containers against physical damage and check regularly
	for leaks.
	- Observe manufacturer's storage and handling recommendations
	contained within this SDS.
	For major quantities:
	- Consider storage in bunded areas - ensure storage areas are
	isolated from sources of community water (including stormwater,
	ground water, lakes and streams).
	- Ensure that accidental discharge to air or water is the subject of a
	contingency disaster management plan; this may require
	consultation with local authorities.

Conditions for safe storage, including any incompatibilities

Suitable container	-	Lined metal can, lined metal pail/ can.
	-	Plastic pail.
	-	Polyliner drum.
	-	Packing as recommended by manufacturer.

	- Check all containers are clearly labelled and free from leaks.
Storage	Avoid contamination of water, foodstuffs, feed or seed.
incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Jeffries CulChar	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Jeffries CulChar	Not Available	Not Available

Exposure controls

Appropriate 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.

Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.

If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered.

Such protection might consist of:

- (a): particle dust respirators, if necessary, combined with an absorption cartridge;
- (b): filter respirators with absorption cartridge or canister of the right type;
- (c): fresh-air hoods or masks.

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.

Type of Contaminant:	Air Speed:
direct spray, spray painting	1-2.5 m/s (200-500 f/min.)
in shallow booths, drum	
filling, conveyer loading,	
crusher dusts, gas discharge	
(active generation into zone	
of rapid air motion)	
grinding, abrasive blasting,	2.5-10 m/s (500-2000 f/min.)
tumbling, high speed wheel	
generated dusts (released at	
high initial velocity into zone	
of very high rapid air	
motion).	

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal	1: Disturbing room air
or favourable to capture	currents
2: Contaminants of low	2: Contaminants of high
toxicity or of nuisance value	toxicity
only.	
3: Intermittent, low	3: High production, heavy
production.	use
4: Large hood or large air	4: Small hood-local control
mass in motion	only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore, the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 4-10 m/s (800-2000 f/min) for extraction of crusher dusts generated 2 metres distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal protection









Eye and face protection

- 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. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin protection

See Hand protection below

Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes

- according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

As defined in ASTM F-739-96 in any application, gloves are rated as:

- Excellent when breakthrough time > 480 min
- Good when breakthrough time > 20 min
- Fair when breakthrough time < 20 min
- Poor when glove material degrades

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task. Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene.
- nitrile rubber.
- butyl rubber.
- fluorocaoutchouc.
- polyvinyl chloride.

Gloves should be examined for wear and/ or degradation constantly.

Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities.
	OTHERWISE:
	- Overalls.
	- Barrier cream.
	- Eyewash unit.

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Use approved positive flow mask if significant quantities of dust becomes airborne.

Appearance Dark brown to black organic solid pellets.

- Try to avoid creating dust conditions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

1.1010-0111111		B	
Physical state	Divided Solid	Relative density (Water	Not Available
		=1)	
Odour	Mild earthy to no	n-octanol / water	Not Available
	odour		
Odour threshold	Not Available	Auto-ignition	Not Available
		temperature (°C)	
pH (as supplied)	Not Available	Decomposition	Not Available
		temperature	
Melting point / freezing	Not Applicable	Viscosity (cSt)	Not Available
point (°C)			
Initial boiling point and	Not Applicable	Molecular weight (g/mol)	Not Applicable
boiling range (°C)			
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm	Not Applicable
		or mN/m)	
Lower Explosive Limit (%)	Not Available	Volatile Component	Not Available
		1	

(%vol)

Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of	See section 7
hazardous reactions	
Conditions to avoid	See section 7
Incompatible	See section 7
materials	
Hazardous	See section 5
decomposition	
products	

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
	Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.
	If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.
Ingestion	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.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Еуе	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.

Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless, exposure by all routes should be minimised as a matter of course.
	Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis, caused by particles less than 0.5 micron penetrating and remaining in the lung.

Jeffries CulChar	TOXICITY	IRRITATION
	Not Available	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity	
	2.* Value obtained from manufacturer's SDS. Unless otherwise specified	
	data extracted from RTECS - Register of Toxic Effect of chemical	
	Substances	

Acute Toxicity	Data either not available or does not fill the criteria for classification	Carcinogenicity	Data either not available or does not fill the criteria for classification
Skin Irritation/Corrosion	Data either not available or does not fill the criteria for classification	Reproductivity	Data either not available or does not fill the criteria for classification
Serious Eye Damage/Irritation	Data either not available or does not fill the criteria for classification	STOT - Single Exposure	Data either not available or does not fill the criteria for classification
Respiratory or Skin sensitisation	Data either not available or does not fill the criteria for classification	STOT - Repeated Exposure	Data either not available or does not fill the criteria for classification
Mutagenicity	Data either not available or does not fill the criteria for classification	Aspiration Hazard	Data either not available or does not fill the criteria for classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Jeffries	ENDPOINT	TEST DURATION	SPECIES	VALUE	SOURCE
CulChar		(HR)			
	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from				
	- 1. IUCLID Toxicity Data				
	- 2. Europe ECHA Registered Substances - Ecotoxicological Information -				
	Aquatic Toxicity				
	- 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated)				

- 4. US EPA, Ecotox database Aquatic Toxicity Data
- 5. ECETOC Aquatic Hazard Assessment Data
- 6. NITE (Japan) Bioconcentration Data
- 7. METI (Japan) Bioconcentration Data
- 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bio-accumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging	 DO NOT allow wash water from cleaning or process equipment to enter drains.
disposal	 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 State Land Waste Management Authority for disposal.
	- Bury residue in an authorised landfill.
	- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code: NOT APPLICABLE

SECTION 15 REGULATORY INFORMATION

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

Not Applicable

SECTION 16 OTHER INFORMATION

SDS Version Summary

Issue #	Issue Date	Sections Updated
1	04/12/2020	

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average
PC – STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value
LOD: Limit of Detection
OTV: Odour Threshold Value
BCF: Bio Concentration Factors
BEI: Biological Exposure Index

This document is copyright.