

Biovin Plant Health Cure

Version No: 1.2

Safety Data Sheet (Conforms to Regulation (EU) No 2015/830)

Issue Date: **11/11/2020** Print Date: **11/11/2020** S.REACH.GBR.EN

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

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

Relevant identified uses	Soil improver
Uses advised against	Not Applicable

1.3. Details of the supplier of the safety data sheet

Registered company name	Plant Health Cure
Address	Veldweg 7 Oisterwijk 5061KJ Netherlands
Telephone	+31 137 200 300
Fax	Not Available
Website	www.phc.eu
Email	info@phc.eu

1.4. Emergency telephone number

Association / Organisation	Plant Health Cure
Emergency telephone numbers	+31 137 200 301
Other emergency telephone numbers	+31 651 328 508

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 Not Applicable	[CLP] and amendments ^[1]
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2.2. Label elements

Hazard pictogram(s) Not Applicable

Signal word Not Applicable

Hazard statement(s)

Not Applicable

Supplementary 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

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	
Not Available	100 Grapemust Not Applicable		
Legend:	1. Classified by Chernwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L * EU IOELVs available		

SECTION 4 First aid measures

4.1. 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.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substrate or mixture

5.2. Special nazards ansing iro	on the substrate of mixture	
Fire Incompatibility None known.		
5.3. 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 Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. 	

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures See section 8

6.2. Environmental precautions

See section 12

6.3. 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.

6.4. Reference to other sections

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

SECTION 7 Handling and storage

7.1. Precautions for safe handl	 Store at room temperature, in a dry place protected from extreme conditions. Store in the original packaging. 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, and check for leakage regularly. 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.
Fire and explosion protection	See section 5
Other information	No special measures are required.

7.2. 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 incompatibility	Avoid contamination of water, foodstuffs, feed or seed. None known

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Not Available	Not Available	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

Not Applicable

INGREDIENT DATA

Ingredient	Material name	TEEL-1	TEEL-2	TEE	L-3
Biovin	Not Available	Not Available	Not Availa	ole Not	Available
Ingredient	Original IDLH		Revised ID	н	
Biovin	Not Available		Not Availabl	9	
0 Functional					
8.2.1. Appropriate engineering controls 8.2.2. Personal protection	Engineering controls are used to rer be highly effective in protecting wort Process controls which involve char Enclosure and/or isolation of emissi 'adds' and 'removes' air in the work ventilation system must match the p Employers may need to use multiple • Local exhaust ventilation is requ proportion will be powdered by • If in spite of local exhaust an ad Such protection might consist of: (a): particle dust respirators, if neced (b): filter respirators with absorption (c): fresh-air hoods or masks. Air contaminants generated in the w circulating air required to effectively Type of Contaminant: direct spray, spray painting in shall generation into zone of rapid air m grinding, abrasive blasting, tumblir very high rapid air motion). Within each range the appropriate v Lower end of the range 1: Room air currents minimal or far 2: Contaminants of low toxicity or of 3: Intermittent, low production. 4: Large hood or large air mass in Simple theory shows that air velocity with the square of distance from the accordingly, after reference to distar 4-10 m/s (800-2000 f/min) for extract producing performance deficits with more when extraction systems are i	kers and will typically be rols are: aging the way a job action on source which keeps environment. Ventilation particular process and ce e types of controls to pre- uired where solids are he mutual friction. Inverse concentration of ssary, combined with an cartridge or canister of vorkplace possess vary remove the contamination (or booths, drum filling, otion) and, high speed wheel get ralue depends on: vourable to capture of nuisance value only. motion y falls rapidly with distate e extraction point (in sim rece from the contamination of crusher dusts g in the extraction apparation.	e independent of worker inte a selected hazard 'physicall' n can remove or dilute an air themical or contaminant in us revent employee overexposu handled as powders or crysta the substance in air could oc n absorption cartridge; ithe right type; ing 'escape' velocities which, nt. conveyer loading, crusher of enerated dusts (released at h Upper end of the range 1: Disturbing room air currer 2: Contaminants of high to: 3: High production, heavy to 4: Small hood-local control nce away from the opening of pple cases). Therefore the air ting source. The air velocity enerated 2 metres distant from the substance in air velocity the substance in a	actions to provide this high lev uce the risk. ' away from the worker and ve contaminant if designed prope e. 'e. Is; even when particulates are cur, respiratory protection sho in turn, determine the 'capture usts, gas discharge (active igh initial velocity into zone of ints icity ise only f a simple extraction pipe. Velo speed at the extraction point of at the extraction point. Other n	el of protection. Intilation that strategically rrly. The design of a relatively large, a certain uld be considered. Velocities' of fresh Air Speed: 1-2.5 m/s (200-500 f/min.) 2.5-10 m/s (500-2000 f/min.) booty generally decreases should be adjusted, le, should be a minimum of techanical considerations,
8.2.2. Personal protection					
Eye and face protection	 Safety glasses with side shields Chemical goggles. Contact lenses may pose a spe the wearing of lenses or restrict and adsorption for the class of of their removal and suitable equip remove contact lens as soon as a clean environment only after v national equivalent] 	cial hazard; soft contactions on use, should be chemicals in use and a comment should be readily s practicable. Lens shou	created for each workplace on account of injury experience available. In the event of ch uld be removed at the first signal.	or task. This should include a r e. Medical and first-aid person emical exposure, begin eye irr ns of eye redness or irritation	eview of lens absorption nel should be trained in gation immediately and - lens should be removed
Skin protection	See Hand protection below				
Hands/feet protection	240 minutes according to EN 374, A	is a preparation of seve or to the application. Ibstances has to be obt of effective hand care. (cation of a non-perfume ve is dependent on usage ntact, material, andard (e.g. Europe Eff y repeated contact may AS/NZS 2161.10.1 or na pected, a glove with a p	ral substances, the resistanc ained from the manufacturer Gloves must only be worn on ad moisturiser is recommend ge. Important factors in the s N 374, US F739, AS/NZS 21 occur, a glove with a protect ational equivalent) is recommo protection class of 3 or highe	e of the glove material can not of the protective gloves and ha clean hands. After using glove ed. election of gloves include: 51.1 or national equivalent). ion class of 5 or higher (breakt	be calculated in advance as to be observed when as, hands should be hrough time greater than

	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
	No special equipment needed when handling small quantities. OTHERWISE:
Other protection	► Overalls.
other protection	Barrier cream.
	Evensh 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.

Try to avoid creating dust conditions.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Powder (dark brown)		
			1
Physical state	Solid	Relative density (Water = 1)	0.65
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	6.5-7.5	Decomposition temperature	>200
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	None
Flammability	Not Applicable	Oxidising properties	None
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available

Solubility in water	Insoluble	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7
10.2. Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7
10.4. Conditions to avoid	See section 7
10.5. Incompatible materials	See section 7
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

11.1. 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.		
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.		
Eye	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.		
	ΤΟΧΙCITY	IRRITATION	
Biovin	Not Available	Not Available	
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute specified data extracted from RTECS - Register of Toxic Effect of cheir 	toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise mical Substances	

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductive toxicity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Germ cell mutagenicity	×	Aspiration Hazard	×
		-ogenan -	ot available or does not fill the criteria for classification le to make classification

SECTION 12 Ecological information

Dissila	Endpoint	Test Duration (hr)	Species	Value	Source
Biovin	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUC	LID Toxicity Data 2. Europe ECHA	A Registered Substances - Ec	otoxicological Information -	Aquatic Toxicitv 3. EF

12.2. Persistence and degradability

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

Continued...

Biovin

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients
12.4. Mobility in soil	

Ingredient	Mobility
	No Data available for all ingredients

12.5.Results of PBT and vPvB assessment

	Р	В	т
Relevant available data	Not Applicable	Not Applicable	Not Applicable
PBT Criteria fulfilled?	Not Applicable	Not Applicable	Not Applicable

12.6. Other adverse effects

No data available

SECTION 13 Disposal considerations

13.1. Waste treatment methods	
Product / Packaging disposal	 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.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

14.1. UN number	Not Applicable		
14.2. UN proper shipping name	Not Applicable		
14.3. Transport hazard class(es)	Class Not Applicable Subrisk Not Applicable		
14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		
	Hazard identification (Kemler)	Not Applicable	
	Classification code	Not Applicable	
14.6. Special precautions for	Hazard Label	Not Applicable	
user	Special provisions	Not Applicable	
	Limited quantity	Not Applicable	
	Tunnel Restriction Code	Not Applicable	

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

14.1.	UN number	Not Applicable		
	UN proper shipping name	Not Applicable		
		ICAO/IATA Class	Not Applicable	
	Transport hazard class(es)	ICAO / IATA Subrisk	Not Applicable	
	01033(03)	ERG Code	Not Applicable	
14.4.	Packing group	Not Applicable		
14.5.	Environmental hazard	Not Applicable		
		Special provisions		Not Applicable
14.6.	14.6. Special precautions for user	Cargo Only Packing In	structions	Not Applicable
		Cargo Only Maximum	Qty / Pack	Not Applicable

Passenger and Cargo Packing Instructions	Not Applicable
Passenger and Cargo Maximum Qty / Pack	Not Applicable
Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

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

14.1. UN number	Not Applicable		
14.2. UN proper shipping name	Not Applicable		
14.3. Transport hazard class(es)	IMDG Class Not Applicable IMDG Subrisk Not Applicable		
14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		
14.6. Special precautions for user	EMS Number Not Applicable Special provisions Not Applicable Limited Quantities Not Applicable		

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable		
14.2. UN proper shipping name	Not Applicable		
14.3. Transport hazard class(es)	Not Applicable Not Applicable		
14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		
14.6. Special precautions for user	Classification codeNot ApplicableSpecial provisionsNot ApplicableLimited quantityNot ApplicableEquipment requiredNot ApplicableFire cones numberNot Applicable		

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

SECTION 15 Regulatory information

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

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2015/830; Regulation (EC) No 1272/2008 as updated through ATPs.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

ECHA SUMMARY

Not Applicable

National Inventory Status

National Inventory Status	
National Inventory	Status
Australia - AIIC	Yes
Australia - Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	Yes
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Mexico - INSQ	Yes

National Inventory	Status
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend: Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients)	

SECTION 16 Other information

Revision Date	11/11/2020
Initial Date	04/11/2020

Full text Risk and Hazard codes

SDS Version Summary

Version	Issue Date	Sections Updated
0.2.1.1.1	04/11/2020	Appearance, Classification, Ingredients, Physical Properties

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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. For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

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