



1610 N 170 E Ave. Tulsa Oklahoma 74116
 Tel: 918-439-4329 Fax: 918-439-4203
 Toll-Free 1-888-834-2001
 www.tomco-harwel.com

Safety Data Sheet Concentrated Soil Conditioner

1. IDENTIFICATION

Synonyms none
 CAS# see Part 3, below
 Material Use turf additive

IN AN EMERGENCY CALL: INFOTRAC 1-800-535-5053

2. HAZARD IDENTIFICATION

GHS Class (Category)	eye irritant (2B)	STOT (3)	carcinogen (2)
Signal Words	WARNING no Pictogram	WARNING	WARNING
Hazard Statements	causes eye irritation (H320)	may cause respiratory tract irritation (H335)	suspected of causing cancer on inhalation (H351)



GHS Precautionary Statements for Labeling

P260, P262, P264 Do not breathe dust. Do not get in eyes. Wash thoroughly after handling.
 P280 Wear eye protection.
 P305, P351, P338 If in eyes, rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

3. COMPOSITION

	CAS NUMBER	%	TLV mg/m ³	LD ₅₀ (mg/kg) ORAL	LD ₅₀ (mg/kg) SKIN	LC ₅₀ mg/m ³ INHALATION
Fly Ash	68131-74-8	60%	not listed	>2000	not known	>5400
Fly Ash may contain quartz (silica)	14808-60-7	(0-6%)	0.025	not known	not known	not known
Humic Acids	1415-93-6	35%	not listed	>5000	>5000	not known
Biochar (carbon)	7440-44-0	5%	not listed	>5000	not known	not known

4. FIRST AID

SKIN: Brush off. Then wash with plenty of water, using soap if necessary. Remove contaminated clothing and do not reuse until laundered. Seek medical help promptly if there is persistent itching or redness in the affected area.

EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance if there is persistent irritation.

INHALATION: Remove from contaminated area promptly. **CAUTION: Rescuer must not endanger himself!** If victim's breathing stops, administer artificial respiration and seek medical aid promptly.

INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this non-toxic product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

5. FLAMMABILITY & FIRE-FIGHTING

Flash Point	will not flash
Autoignition Temperature	not known – will burn in fire; cannot sustain burning
Flammable Limits	not known
Combustion Products	carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
Firefighting Precautions	as for materials sustaining fire; compatible with water; firefighters must wear SCBA
Static Discharge	cannot accumulate a static charge

6. ACCIDENTAL RELEASE MEASURES

Leak Precaution	dike to control spillage and prevent environmental contamination
Handling Spill	sweep, shovel & store in closed containers for disposal; <i>moisten spilled material prior to sweeping to minimize dust formation – OR – wear a tight-fitting respirator with an effective dust filter</i>

7. HANDLING & STORAGE

Store away from oxidizing agents such as nitrates or hydrogen peroxide stronger than 30%.

Avoid generating or breathing product dust. If dust forms in use, install adequate ventilation to clear workplace air.

Prior to using, consider moistening the product with a little water to prevent dust formation. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath should be available near the workplace.

8. EXPOSURE CONTROL & PERSONAL PROTECTION**Silica (Quartz):**

ACGIH TLV	0.025mg/m ³ (respirable fraction – cancer)	ACGIH STEL	not listed
OSHA PEL	10mg/m ³ (respirable fraction – silicosis)	OSHA STEL	not listed
Ventilation	mechanical ventilation may be required to clear workplace air of dust.		
Hands	no special protective gloves required; leather or tightly woven cotton gloves may be worn		
Eyes	safety glasses with side shields – <i>always protect eyes!</i>		
Clothing	no special protective clothing required		

9. PHYSICAL AND CHEMICAL PROPERTIES

NOTE: for Flash Point, Autoignition Temperature & Flammable Limits see Part 5.

Odor & Appearance	dark grey-brown granular material with a slight earthy odor of compost
Odor Threshold	not known
Vapor Pressure	not known; only the humic acids are capable of vaporizing to some extent
Evaporation Rate (Butyl Acetate = 1)	not known – not volatile
Vapor Density (air = 1)	not known – not volatile
Boiling Point	not known – humic acids decompose without melting or boiling
Freezing Point	~300°C / ~570°F – <i>humic acids only; other components will not melt</i>
Decomposition Temperature	not known
Density	~1.5 kg/liter – <i>air entrainment makes precise measurement impossible</i>
Water Solubility	not known – <i>largely water insoluble</i>
Viscosity	not applicable
pH	3-5 – <i>slightly acid</i>

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

10. REACTIVITY

Dangerously Reactive With	not known
Also Reactive With	strong oxidizers
Chemical Stability	stable; will not polymerize
Decomposes in Presence of	no decomposition triggers known
Decomposition Products	none apart from Hazardous Combustion Products
Mechanical Impact	not sensitive

11. TOXICITY INFORMATION**i. ACUTE EXPOSURE**

Skin Contact	little to no effect
Skin Absorption	yes, slowly; toxic effects unlikely by this route
Eye Contact	irritating ¹ – <i>physical (as particles), not chemical, irritancy</i>
Inhalation	irritating – sneezing, coughing – <i>physical (as particles), not chemical, irritancy</i>
Ingestion	little to no effect anticipated
Calculated LD ₅₀ (oral)	2620mg/kg (rat)
LD ₅₀ (skin)	<i>insufficient information to calculate</i>
LC ₅₀ (inhalation)	<i>insufficient information to calculate</i>

ii. CHRONIC EXPOSURE

General	no effect of prolonged contact known or likely
Sensitizing	not a sensitizer
Carcinogen/Tumorigen	the presence of up to 6% silica (quartz) constitutes a cancer risk on inhalation
Reproductive Effect	no known effect on humans or animals ¹
Mutagen	not known to be a mutagen or teratogen in humans or animals ¹
Synergistic With	not known

NOTE: Humic acids and carbon are not known to have reproductive, teratogenic, carcinogenic or mutagenic effects & do not act as sensitizers.

12. ECOLOGICAL INFORMATION**Fly Ash:**

Bioaccumulation	composed of inert inorganic substances which are neither absorbed nor metabolized
Biodegradation	composed of inert inorganic substances which cannot biodegrade
Abiotic Degradation	some materials will be removed by plant life to be used as micronutrients
Mobility in soil, water	generally water insoluble; likely to be immobile in soil and the water column

Aquatic Toxicity

LC ₅₀ (Fish, 96hr)	>100mg/liter (Poecilia reticulata) ¹
EC ₅₀ (Crustacea, 48hr)	75 & 100mg/liter (Daphnia magna) ¹
EC ₅₀ (Algae, 72hr)	>100mg/liter (Desmodesmus subspicatus) ¹
EC ₅₀ (Bacteria)	>1000mg/liter (domestic sewage sludge) ¹

Humic Acids

Bioaccumulation	readily metabolized and will not bioaccumulate ²
Biodegradation	biodegrades readily and rapidly; no biodegradation data available ²
Abiotic Degradation	not known
Mobility in soil, water	slightly water soluble; may move through soil & the water column
Aquatic Toxicity	<i>These naturally-occurring substances (found in peat beds) are not known to be harmful to aquatic life.</i>
LC ₅₀ (Crustacea, 48hr)	>100mg/liter (Ceriodaphnia dubia) ²

Carbon (Biochar): no data – not known to be harmful to aquatic life

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

13. DISPOSAL CONSIDERATIONS

Waste Disposal **do not flush to sewer**; dispose of on agricultural or forest land, but taking care not to exceed local "nutrient management regulations

Containers **Drums** should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use.
Pails must be vented and thoroughly dried prior to crushing and recycling.
IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5 years). Steel containers must be inspected, pressure tested & recertified every 5 years.
Warning: never cut, drill, weld or grind on or near this container, even if empty.

14. TRANSPORT INFORMATION

USA 49 CFR & Canada/International TDG

Product Identification Number	UN – not regulated for transport
Shipping Name	not regulated for transport
Classification	not regulated for transport
<i>Marine Pollution</i>	<i>not a marine pollutant</i>
<i>ERAP Required</i>	<i>No</i>
<i>Reportable Quantity (RQ)</i>	<i>none</i>

15. REGULATIONS

Canada DSL	on inventory
U.S.A. TSCA	on inventory
Europe EINECS	on inventory

16. OTHER INFORMATION

Date of Preparation August 2015

Date of Revision -

Prepared for Tomco-Harwel, by Peter Bursztyn

With data from the Registry of Toxic Effects of Chemical Substances (RTECS), Hazardous Substance Data Base (HSDB), Cheminfo (CCOHS), OSHA, IUCLID Datasheets (European Chemical Substance Information System - ESIS), & others sources (below if used), as required/available

(1) European Chemicals Agency (EChA) dossier on FBC Ash:

<http://apps.echa.europa.eu/registered/data/dossiers/DISS-97d85c15-4762-3e07-e044-00144f67d031/AGGR-da2fcdef-2971-4375-a40a-f3b645405f6a> [DISS-97d85c15-4762-3e07-e044-00144f67d031.html#AGGR-da2fcdef-2971-4375-a40a-f3b645405f6a](http://apps.echa.europa.eu/registered/data/dossiers/DISS-97d85c15-4762-3e07-e044-00144f67d031.html#AGGR-da2fcdef-2971-4375-a40a-f3b645405f6a)

(2) Categorization Results from the Canadian Domestic Substances List (OECD document):

<http://webnet.oecd.org/CCRWEB/ChemicalDetails.aspx?ChemicalID=005626b6-b776-480e-b03b-e73a32a054c4>

last page of SDS

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053