Shepherd

SAFETY DATA SHEET

1. Identification

Product identifier BiCAT® 8118

Other means of identification

Product Code 1381C

Recommended use Polyurethane catalyst.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer / Supplier: The Shepherd Chemical Company

Address: 4900 Beech Street

Norwood, Ohio 45212 USA

Telephone: 513-731-1110 **Fax**: 513-731-2151

Emergency USA: CHEMTREC: 800-424-9300 Emergency International: CHEMTREC: 00 1 703-527-3887

Emergency EU +112

Emergency China 0532-83889090

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2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Avoid breathing dust/fume/gas/mist/vapors/spray.

Response

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 100% of the mixture consists of component(s) of unknown acute oral toxicity. 62% of the mixture

consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. This product

does not meet the criteria for GHS classification.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Bismuth(3+) neodecanoate		34364-26-6	<62%
Neodecanoic acid		26896-20-8	<48%

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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Composition comments

The full text for all R-phrases is displayed in Section 16 of the SDS.

4. First-aid measures

Inhalation

Move injured person into fresh air and keep person calm under observation. If uncomfortable:

Seek hospital and take along these instructions.

Skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing

and shoes. Get medical attention if irritation persists after washing.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if

irritation persists after washing.

Coughing. Dizziness. Redness.

Ingestion

Do not induce vomiting without advice from poison control center.

Most important

symptoms/effects, acute and

delayed

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire. None known.

Fire may produce irritating, corrosive and/or toxic gases. During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Avoid inhalation of vapors or mists. See Section 8 of the SDS for Personal Protective Equipment. For personal protection, see section 8 of the SDS. Avoid contact with skin and eyes.

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

7. Handling and storage Precautions for safe handling

Avoid inhalation of vapors or mists. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. Observe good industrial hygiene practices. Local exhaust is recommended.

Wear approved safety goggles. Wear suitable protective clothing and gloves.

Avoid discharge into drains, water courses or onto the ground.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in tightly closed original container in a cool, dry well-ventilated place.

This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

8. Exposure controls/personal protection

Occupational exposure limits Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

This material does not have established exposure limits.

Appropriate engineering controls

Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Make sure to provide adequate control by applying the "COSHH Essentials" procedure.

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Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Wear approved safety goggles. Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Nitrile gloves are recommended, but be aware that

the liquid may penetrate the gloves. Frequent change is advisable.

Wear appropriate clothing to prevent any possibility of skin contact. Other

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. In case of inadequate

ventilation use suitable respirator. Use respiratory equipment with gas filter, type A2.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Pale yellow Liquid. **Appearance**

Physical state Liquid. **Form** Liquid. Pale yellow. Color Odor Musty.

Odor threshold Not available. Not available. pН

Melting point/freezing point -38 °F (-38.89 °C) (Neodecanoic acid)

>= 469 °F (>= 242.78 °C) (Neodecanoic acid) Initial boiling point and boiling

range

>= 221.0 °F (>= 105.0 °C) Closed Cup Flash point

Evaporation rate <= 1 (Neodecanoic acid)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

0.22 mm Hg at 50 °C (Neodecanoic acid) Vapor pressure

Vapor density Not available.

1.1 Relative density

Solubility(ies)

Negligible. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** Not available.

Other information

Not explosive. **Explosive properties**

Flammability class Combustible IIIB estimated

Combustible IIIB Flash point class **Oxidizing properties** Not oxidizing **Loose Packing Density** Not available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Stable under normal temperature conditions. Chemical stability

Material name: BiCAT® 8118 SDS US Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Heat, sparks, flames.

Incompatible materials

Acids and bases. Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactNo adverse effects due to skin contact are expected.Eye contactDirect contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Not known. Irritating to eyes, respiratory system and skin.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization None known.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

US OSHA Hazard Categories (10)

Not regulated.

US OSHA Hazard Categories (9)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged skin contact may defat the skin and produce dermatitis. **Further information** If absorbed, bismuth compounds may affect the kidneys and liver.

12. Ecological information

EcotoxicityThe product components are not classified as environmentally hazardous. However, this does not

exclude the possibility that large or frequent spills can have a harmful or damaging effect on the

environment.

Persistence and degradability
The product is not expected to be biodegradable.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil No data available.

Other adverse effects None known.

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13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Disposal

recommendations are based on material as supplied. Disposal must be in accordance with current

applicable laws and regulations, and material characteristics at time of disposal.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers retain product residue, follow label warnings even after

container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US OSHA Hazard Categories (9)

Not regulated.

US OSHA Hazard Categories (10)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

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US state regulationsCalifornia Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

 Issue date
 01-13-2015

 Revision date
 01-05-2018

Version # 04

United States & Puerto Rico

Further information None known.

Disclaimer The Shepherd Chemical Company cannot anticipate all conditions under which this information

and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently

available.

Revision information Physical & Chemical Properties: Multiple Properties

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Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).