

1. Identification

Product identifier	AxTrap 4001
Other means of identification	G1001
Recommended use	Hydrogen sulfide removal from gases
Recommended restrictions	None known.
General Description	Proprietary dry granular filtration media used for selective removal of hydrogen sulfide. Mixed iron oxides on natural zeolite.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer	
Company name	Axens North America, Inc.
Address	824 Lone Star Drive O'Fallon, MO 63366
Telephone	636-272-8000
Emergency phone number	636-272-8000

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands and clothing after handling.
Storage	Store away from incompatible materials.
Disposal requirement	Dispose of waste and residues in accordance with local authority
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition / information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium aluminosilicate	Natural Zeolite – Clinoptilolite	1318-02-1	65 to 80
Iron Oxide, Various			20 to 35

other components are below reportable levels or not regulated

4. First-aid measures

Inhalation	Move to fresh air. Get medical attention if irritation develops and persists.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth, drink plenty of water. Do not induce vomiting. Get medical attention.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.

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

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

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed. Prevent contaminated water from discharge to environment.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

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

General fire hazards No unusual fire or explosion hazards noted. Decomposition products may include iron oxides at high temperatures.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls / personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Iron Oxides	PEL	5 mg/m ³	Fume.
		15 mg/m ³	Dust: Total

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Iron Oxides	TWA	5 mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Iron Oxides	TWA	500 mg/m ³	Dust and fume.

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

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment, NIOSH-MSHA approved, N95 or better rated respirators are recommended along with user training, repair/cleaning, and fit testing.

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

Appearance

Physical state	Solid
Form	Granular
Color	RED/BROWN/BLACK
Odor	ODORLESS
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	2120 of (1160 °C) estimated
Initial boiling point and boiling range	2258.39 of (1236.88 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
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.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.15 hPa estimated
Vapor density	Not available,
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10 lbs./gal. estimated
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing,
Percent volatile	10 % estimated
Specific gravity	1.2 estimated

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents,
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effect

Acute toxicity	Not available as mixture.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation,

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This 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 inhalation may be harmful.

Further information

This product has no known adverse effect on human health handled appropriately.

12. Ecological information

Ecotoxicity	The product is 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	No data is available on the degradability of this mixture.
Bioaccumulative potential	No evidence to indicate significant bioaccumulative potential.
Mobility in soil	No evidence to indicate significant mobility in soil.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site,
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 (see: Disposal instructions).

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.

14. Transport information

DOT Shipping Description: Not regulated for transportation by DOT, TDG, IMDG, ICAO/IATA.

Canada TDG Shipping Description: Not Regulated

UN PIN NO: Not Regulated.

IMDG Shipping Description: Not Regulated.

ICAO/IATA Shipping Description: Not Regulated.

15. Regulatory information

US federal regulations

One or more components are listed on TSCA.

This product or its components are 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. Notification not required.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Not regulated.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

No

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 (SDWA)

Not regulated.

USFDA – Primary components are listed as Generally Regarded as Safe (GRAS).

US State Regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
No.

US. Massachusetts RTK - Substance List

TRADE SECRET (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

TRADE SECRET (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

TRADE SECRET (CAS Proprietary)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California 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.

Country(s) or region	Inventory name	On inventory (yes/no)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
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)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

"Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing countries).

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

Issue date	June-01-2016
Version #	04
HMIS@ratings	Health: 1 Flammability: 0 Physical hazard: 0 Personal Protection: E
NFPA ratings	Health: 1 Flammability 0 Instability: 0

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