

Material Safety Data Sheet

Creation Date 16-Mar-2010

Revision Date 25-Mar-2013

Revision Number 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Aniline

Cat No.

AC423420000; AC423420010; AC423420025; AC423420050; AC423425000

Synonyms

Recommended Use

Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Entity / Business Name Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Aminobenzene; Phenylamine

Laboratory chemicals

Emergency Telephone Number For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!						
Emergency Overview						
skin and if swallowed. Risk of effects. Danger of serious d	cancer hazard. May cause cancer based on animal data. of serious damage to eyes. May cause an allergic skin rea amage to health by prolonged exposure. May cause herita NING! This product contains a chemical known in the Stat	action. Possible risks of irreversible able genetic damage. Very toxic to				
Appearance Light yellow	Physical State Liquid	Odor rotten-egg like				
Target Organs	Liver, Kidney, spleen, Central nervous system (CNS), B system, Bladder	lood, Eyes, Skin, Cardiovascular				
Potential Health Effects						

Acute Effects Principle Routes of Exposure

Eyes Skin Inhalation	Risk of serious damage to eyes. Toxic in contact with skin. May cause irritation. May produce an allergic reaction. Toxic by inhalation. May cause irritation of respiratory tract. Inhalation may cause central nervous system effects.
Ingestion	Toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	Possible cancer hazard based on tests with laboratory animals. Tumorigenic effects have been reported in experimental animals. Experiments have shown reproductive toxicity effects on laboratory animals. Possible risks of irreversible effects. Danger of serious damage to health by prolonged exposure. May cause cyanosis. May cause adverse liver effects. May cause adverse kidney effects. Repeated contact may cause allergic reactions in very susceptible persons.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Preexisting eye disorders. Kidney disorders. Liver disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz				
Component CAS-No Weight %				
Aniline	62-53-3	>95		

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	76°C / 168.8°F
Method -	No information available.
Autoignition Temperature	540°C / 1004°F
Explosion Limits Upper Lower	11 vol % 1.3 vol %
Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact Sensitivity to static discharge	No information available. No information available.

Specific Hazards Arising from the Chemical

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA	Health 2	Flammability 2	Instability 0	Physical hazards N/A		
6. ACCIDENTAL RELEASE MEASURES						
Personal Precautions		Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.				
Environmental Precaution		Should not be released into the environment. Do not allow material to contaminate ground vater system. Do not flush into surface water or sanitary sewer system.				
Methods for Containmer Up		Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal				
	7. HANDLING AND STORAGE					
Handling	open f	Use only under a chemical fume hood. Wear personal protective equipment. Keep away open flames, hot surfaces and sources of ignition. Do not get in eyes, on skin, or on cloth Do not breathe vapors/dust. Do not ingest.				
Storage		Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Protect from sunlight.				

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aniline	TWA: 2 ppm Skin	(Vacated) TWA: 2 ppm (Vacated) TWA: 8 mg/m ³ Skin TWA: 5 ppm TWA: 19 mg/m ³	IDLH: 100 ppm

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Aniline	TWA: 2 ppm TWA: 7.6 mg/m³ Skin	TWA: 2 ppm TWA: 10 mg/m ³ STEL: 5 ppm STEL: 20 mg/m ³	TWA: 2 ppm Skin

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Skin and body protection Respiratory Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Wear appropriate protective gloves and clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance Odor **Odor Threshold** pН Vapor Pressure Vapor Density Viscosity **Boiling Point/Range Melting Point/Range Decomposition temperature** Flash Point **Evaporation Rate Specific Gravity** Solubility log Pow Molecular Weight Molecular Formula

Liquid Light yellow rotten-egg like No information available. 8.8 36 g/L aq.sol. 0.5 mmHg @ 20 °C 3.3 (Air = 1.0) 4.4 mPa.s at 20 °C 181 - 185°C / 357.8 - 365°F@ 760 mmHg -6.2°C / 20.8°F 190 °C 76°C / 168.8°F 1 (Butyl acetate = 1.0) 1.021 Slightly soluble in water No data available 93.13 C6 H7 N

10. STABILITY AND REACTIVITY

Stability

Conditions to Avoid

Incompatible Materials

Light sensitive.

Incompatible products. Heat, flames and sparks. Exposure to light.

Strong oxidizing agents

Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOx)

Hazardous Polymerization

Hazardous Reactions

Hazardous polymerization does not occur.

None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component LD50 Oral		LD50 Dermal	LC50 Inhalation	
Aniline	250 mg/kg (Rat)	1400 mg/kg (Rat)	Not listed	

Irritation	Severe eye irritant
Toxicologically Synergistic Products	No information available.

Chronic Toxicity

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

(Component	ACGIH	IARC	NTP	OSHA	Mexico
	Aniline	A3	Not listed	Not listed	Not listed	A3

ACGIH: (American Conference of Governmental Industrial Hygienists)

- A1 Known Human Carcinogen
- A2 Suspected Human Carcinogen
- A3 Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Sensitization	May cause sensitization by skin contact
Mutagenic Effects	No information available.
Reproductive Effects	Experiments have shown reproductive toxicity effects on laboratory animals.
Developmental Effects	No information available.
Teratogenicity	No information available.
Other Adverse Effects	Tumorigenic effects have been reported in experimental animals See actual entry in RTECS for complete information.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Aniline	Not listed	Oncorhynchus mykiss: LC50	EC50 = 425 mg/L 5 min	EC50 = 0.16 mg/L 48h
		= 10.96 mg/L 96h	EC50 = 488 mg/L 15 min	-

Persistence and Degradability

Readily biodegradable.

Bioaccumulation/Accumulation

No information available

Mobility

Component	log Pow
Aniline	0.9

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Aniline - 62-53-3	U012	-

14. TRANSPORT INFORMATION

DOT

UN-No	UN1547
Proper Shipping Name	ANILINE
Hazard Class	6.1
Packing Group	II

TDG

UN-No	UN1547
Proper Shipping Name	ANILINE
Hazard Class	6.1
Packing Group	II

ΙΑΤΑ

UN-No	UN1547
Proper Shipping Name	Aniline
Hazard Class	6.1
Packing Group	II

IMDG/IMO

UN-No	UN1547
Proper Shipping Name	Aniline
Hazard Class	6.1
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

15. REGULATORY INFORMATION

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Aniline	Х	Х	-	200-539-	-		Х	Х	Х	Х	Х
				3							

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated

polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Aniline	62-53-3	>95	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Aniline	Х	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Aniline	Х		-

OSHA

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Aniline	5000 lb	5000 lb

California Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL
Aniline	62-53-3	Carcinogen	100 µg/day

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Aniline	Х	Х	Х	Х	Х

U.S. Department of Transportation

Reportable Quantity (RQ):YDOT Marine PollutantNDOT Severe Marine PollutantN

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade

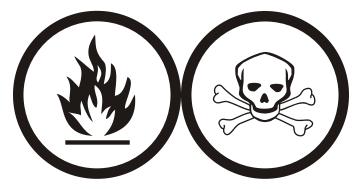
Moderate risk, Grade 2

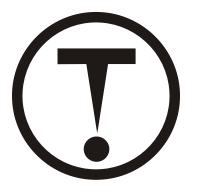
Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B3 Combustible liquid D1A Very toxic materials D2B Toxic materials





16. OTHER INFORMATION

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
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Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS