

HAZARDS IDENTIFICATION

(ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.**Effects of overexposure :**

Inhalation : Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, diarrhea, chest pain, blurred vision, coughing, difficulty with speech, central nervous system depression, intoxication, tightness of chest, metallic taste, confusion, anesthetic effect or narcosis, difficulty of breathing, blood abnormalities, tremors, liver damage, kidney damage, spleen damage, pulmonary edema, neurotoxicity, loss of consciousness, respiratory failure, asphyxiation, death.

Skin contact : Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting, blistering, severe skin irritation. Skin contact may result in dermal absorption of component(s) of this product which may cause drowsiness, dizziness and/or lightheadedness, headache, nausea, vomiting, central nervous system depression.

Eye contact : Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, blurred vision, tearing of eyes, redness of eyes, severe eye irritation, corneal injury.

Ingestion : Ingestion may cause lung inflammation and damage due to aspiration of material into lungs, mouth and throat irritation, mucous membrane irritation, fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, diarrhea, gastro-intestinal disturbances, abdominal pain, central nervous system depression, intoxication, anesthetic effect or narcosis, difficulty of breathing, blood abnormalities, liver damage, kidney damage, pulmonary edema, convulsions, loss of consciousness.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, kidney disorders, liver disorders.

FIRST-AID MEASURES

(ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES

(ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may explode when exposed to extreme heat or fire. Vapors may ignite explosively at ambient temperatures. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. Closed containers may burst if exposed to extreme heat or fire. May decompose under fire conditions emitting irritant and/or toxic gases.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide, acrid fumes, toxic gases, smoke and soot. Halogenated compounds.

ACCIDENTAL RELEASE MEASURES

(ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Ventilate area with explosion-proof equipment. Spills may be collected with absorbent materials. Use non-sparking tools. Evacuate all unnecessary personnel. Place collected material in proper container. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE

(ANSI Section 7)

Handling and storage : Store below 80F. Store below 100F (38C). Keep away from heat, sparks and open flame. Keep away from direct sunlight, heat and all sources of ignition.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Empty containers may contain hazardous residues. Ground equipment when transferring to prevent accumulation of static charge.

EXPOSURE CONTROLS/PERSONAL PROTECTION

(ANSI Section 8)

Respiratory protection : The supplier of parachlorobenzotrifluoride (pobctf) has established an occupational exposure limit for pobctf of 25 ppm as an 8-hour tva. When airborne concentrations of pobctf are unknown or exceed established guidelines, respiratory protection is required. Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) *Respirator* Approved elastomeric sealing-surface facepiece respirator outfitted with *organic vapor cartridges and paint spray (dust/mist) prefilters*. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors. Use explosion-proof equipment. Use non-sparking equipment.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing, face shield, apron, boots.

STABILITY AND REACTIVITY

(ANSI Section 10)

Under normal conditions : Stable can form explosive peroxides on long standing in air. See section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, reducing agents, bases, aldehydes, amines, alkalis, peroxides, nitric acid, metal salts, combustible materials, caustics, mineral acids. Nitrates.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, sparks, open flame, ignition sources.

Hazardous polymerization : Will not occur

The information contained herein is based on data available at the time of preparation of this data sheet which Akzo Nobel Paints believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. Akzo Nobel Paints shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and the users of this material. Complies with OSHA hazard communication standard 29CFR1910.1200.

TOXICOLOGICAL INFORMATION

(ANSI Section 11)

Supplemental health information : Contains a chemical that is moderately toxic by ingestion. Contains a chemical that is toxic by inhalation. Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. A 28-day inhalation study was conducted with pcbtf at dose levels of 100, 250, 500, and 1000 ppm in rats for 6 hr/day, 5 days/week. Clinical signs included increased activity at 250 ppm and above. Hepatocyte hypertrophy was observed in all animals at dose levels of 500 and 1000 ppm and some animals at lower levels. Kidney/body weight ratios were significantly increased in male and female rats. Male kidney changes were attributed to alpha-2u-globulin and therefore not relevant to humans. Gavage studies of pcbtf in laboratory rodents for treatment periods of 14, 28, and 90 days have demonstrated significant liver and kidney toxicity at dose levels of 400-1000 mg/kg/day. Evidence of target organ toxicity included significant increases in relative liver and kidney weights, clinical chemistry values and histopathological findings. Renal toxicity which occurred only in male rats, was attributed to hyaline droplet nephropathy and is highly unlikely to develop in humans. The noael's for all these studies range from 10 to 100 mg/kg/day. A 90 day rat inhalation toxicity and neurobehavioral study was conducted using exposures of 0-250 ppm for 6 hrs/day, 5 days/week. No pcbtf-related macroscopic observations. Pcbtf-related centrilobular hypertrophy was present in the livers of males and females at the highest dose after 13 weeks. No centrilobular hypertrophy was observed at any level among recovery animals. There were no pcbtf-related effects on the nervous system as measured by a functional observation battery, muscular activity measurements and neuropathology. A noel of 50 ppm was established in this study for liver hepatocyte hypertrophy in male and female rats. If the hepatocyte hypertrophy observed is considered to be an adaptive response to pcbtf, the noael for this study is 250 ppm. Other effects of overexposure may include toxicity to liver, kidney, central nervous system, blood, heart, reproductive system.

Physical Data

(ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
000T0000	t-0 zero voc thinner	11.19	23.96	n/d	109 f	282-282	220	UN1263, paint, combustible liquid, PGIII
005T0000	t-5 thinner	7.16	860.01	99.99	80 f	278-290	*230	UN1307, xylene solution, 3, PGIII
009T0000	t-9 thinner	7.71	925.68	99.99	100 f	277-355	*220	UN1263, paint related material, combustible liquid, PGIII
010T0000	t-10 thinner	6.89	827.24	99.99	50 f	180-290	*230	UN1263, paint related material, 3, PGII
015T0000	t-15 low haps thinner	6.97	835.30	n/d	50 f	180-355	*330	UN1263, paint related material, 3, PGII
017T0000	t-17 thinner	7.91	949.85	99.99	136 f	329-338	120	UN1263, paint related material, combustible liquid, PGIII
030T0000	t-30 urethane hot weather thinner	10.02	3.59	n/d	none	468-468	110	paint ** protect from freezing **

Ingredients

Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	000T0000	005T0000	009T0000	010T0000	015T0000	017T0000	030T0000
benzene, ethyl-	ethylbenzene	100-41-4			10-20			5-10	
2-pentanone, 4-methyl-	methyl isobutyl ketone	108-10-1						20-30	
1,3-dioxolan-2-one, 4-methyl-	propylene carbonate	108-32-7							99-100

Carcinogenicity : In long term (2 year) inhalation studies, the national toxicology program (NTP) found clear evidence of carcinogenic activity in mice and male rats and some evidence of carcinogenic activity in female rats exposed to cumene. Contains formaldehyde, a potential cancer hazard. Rats exposed to formaldehyde via inhalation developed cancer of the nasal cavity. Evidence in humans is limited (nasal and nasopharyngeal cancer). Formaldehyde is listed as a carcinogen by OSHA, probable human carcinogen (group 2a) by IARC, and a known human carcinogen by NTP. Overexposure can cause eye, skin, and respiratory tract irritation, and skin and respiratory sensitization. The international agency for research on cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (group 2b) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. In a 2 year inhalation study conducted by the national toxicology program (NTP), ethylbenzene vapor at 750 ppm produced kidney and testicular tumors in rats and lung and liver tumors in mice. Genetic toxicity studies showed no genotoxic effects. The relevance of these results to humans is not known.

Reproductive effects : High exposures to xylene in some animal studies, often at maternally toxic levels, have affected embryo/fetal development. The significance of this finding to humans is not known. Contains toluene. In laboratory tests, fetotoxicity and developmental abnormalities have been observed in experimental animals following maternal exposure to toluene. Possible reproductive hazard based on animal data.

Mutagenicity : Contains parachlorobenzotrifluoride (pcbtf). The ames test was negative with and without s9 metabolic activation. Pcbtf induced sister-chromatid-exchanges (sces) in mouse lymphoma cells with and without s9 metabolic activation at doses from 2.5 To 40 micrograms per milliliter. In the mouse lymphoma assay which did not incorporate metabolic activation, a dose-response effect was observed.

Teratogenicity : No teratogenic effects are anticipated

ECOLOGICAL INFORMATION

(ANSI Section 12)

No ecological testing has been done by akzo nobel paints llc on this product as a whole.

DISPOSAL CONSIDERATIONS

(ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION

(ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

Ingredients (Continued)

Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	000T0000	005T0000	009T0000	010T0000	015T0000	017T0000	030T0000
2-propanol, 1-methoxy-, acetate	propylene glycol monomethyl ether	108-65-6			50-60				
1,3,5-trimethylbenzene	1,3,5-trimethylbenzene	108-67-8			1-5		5-10		
benzene, methyl-	toluene	108-88-3		1-5					
2-heptanone	methyl amyl ketone	110-43-0			1-5		20-30		
benzene, dimethyl-	xylene	1330-20-7		80-90		40-50	1-5		
formaldehyde	formaldehyde	50-00-0							.01-1
solvent naphtha (petroleum), light aromatic	light aromatic solvent naphtha	64742-95-6			10-20		20-30		
2-propanol	isopropyl alcohol	67-63-0				20-30			
1-propanol, 2-methoxy-, acetate	1-propanol, 2-methoxy-, acetate	70657-70-4		.01-1	1-5				
benzene	benzene	71-43-2							
propanoic acid, 3-ethoxy-, ethyl ester	ethyl 3-ethoxypropionate	763-69-9						99-100	
benzene, 1,2,4-trimethyl-	pseudocumene	95-63-6			10-20		20-30		
benzene, 1-chloro-4-(trifluoromethyl)	parachlorobenzotrifluoride	98-56-6	99-100						
benzene, (1-methylethyl)-	cumene	98-82-8	1-1.0				1-5		

Chemical Hazard Data

(ANSI Sections 2, 8, 11, and 15)

Common Name	CAS. No.	ACGIH-TLV			OSHA-PEL			S.R. Std.	S2	S3	CC	H	M	N	I	O
		8-Hour TWA	STEL	C	8-Hour TWA	STEL	C									
ethylbenzene	100-41-4	100 ppm	125 ppm	not est.	100 ppm	not est.	not est.	not est.	n	y	y					
methyl isobutyl ketone	108-10-1	20 ppm	75 ppm	not est.	100 ppm	not est.	not est.	not est.	n	y	y					
propylene carbonate	108-32-7	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n					
propylene glycol monomethyl ether	108-65-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n					
1,3,5-trimethylbenzene	108-67-8	25 ppm	35 ppm	not est.	not est.	not est.	not est.	not est.	n	n	n					
toluene	108-88-3	20 ppm	not est.	not est.	200 ppm	not est.	not est.	not est.	n	y	y					
methyl amyl ketone	110-43-0	50 ppm	not est.	not est.	100 ppm	not est.	not est.	not est.	n	n	n					
xylene	1330-20-7	100 ppm	150 ppm	not est.	100 ppm	not est.	not est.	not est.	n	n	n					
formaldehyde	50-00-0	not est.	not est.	not est.	0.3 ppm	not est.	not est.	not est.	y	y	y					
light aromatic solvent naphtha	64742-95-6	not est.	not est.	not est.	500x ppm	not est.	not est.	not est.	n	n	n					
isopropyl alcohol	67-63-0	200 ppm	400 ppm	not est.	400 ppm	not est.	not est.	not est.	n	n	n					
1-propanol, 2-methoxy-, acetate	70657-70-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n					
benzene	71-43-2	5 ppm	2.5 ppm	not est.	1 ppm	5 ppm	not est.	not est.	n	n	n					
ethyl 3-ethoxypropionate	763-69-9	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	y	y					
pseudocumene	95-63-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n					
parachlorobenzotrifluoride	98-56-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n					
cumene	98-82-8	50 ppm	not est.	not est.	50 ppm	not est.	not est.	not est.	n	y	y					

Footnotes:
 C=Celling - Concentration that should not be exceeded, even instantaneously.
 S=Skin - Additional exposure, over and above atroom exposure, may result from skin absorption.
 n/a=not applicable
 ppm=parts per million
 ng/ml3=milligrams per cubic meter
 Sup Com=Supplier Confidential
 H=Hazardous Air Pollutant, M=Marine Pollutant
 P=Pollutant, S=Severe Pollutant
 Carcinogenicity Listed By:
 N=NTP, I=IARC, O=OSHA, Y=yes, n=no

