

Material Safety Data Sheet

Effective Date: 14-JUN-2006  
Product: TRANSACTIVE

I. IDENTIFICATION

Chemical Name: SEE SECTION III, INGREDIENT STATEMENT  
Chemical Family: SPRAY ADJUVANTS/SURFACTANTS  
Formula: NOT APPLICABLE, FORMULATED MIXTURE.  
Synonyms: NONE  
CAS Number: NOT APPLICABLE, FORMULATED MIXTURE.  
EPA Number: NONE REQUIRED

II. PHYSICAL DATA

Boiling Point: >212 DEGREES  
Freezing Point: <35 DEGREES F.  
Spec Gravity: 1.110 GMS/CC  
Vapor Pressure: NOT DETERMINED  
Vapor Density: NOT DETERMINED  
Solubility: MISCIBLE  
Volatiles: NOT DETERMINED  
Evaporation: <0.1 (N-BUTYL ACETATE = 1)  
Melting Point: NOT APPLICABLE  
Appearance: CLEAR BLUE LIQUID, AMMONIACAL ODOR.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
PROPRIETARY BLEND OF NONIONIC SURFACTANTS, BUFFERING AGENTS AND AMMONIUM SALT SOLUTION.		100.00	N/E	MILD SKIN AND SEVERE EYE IRRITANT

IV. FIRE AND EXPLOSION HAZARD

Flash Point: AQUEOUS SOLUTION  
Autoignition Temp: NOT APPLICABLE  
Flammable Limit: NOT APPLICABLE  
Extinguishing Media: ALCOHOL FOAM, DRY CHEMICAL AND CARBON DIOXIDE.  
Special Fire Fight Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND AVOID BREATHING FUMES. WATER SPRAY MAY BE INEFFECTIVE.  
Fire and Expl Hazard: NONE CURRENTLY KNOWN.

V. HEALTH HAZARD

Carcinogen Information: NOT LISTED

Material Safety Data Sheet

Effective Date: 14-JUN-2006  
Product: TRANSACTIVE

-----  
ACUTE EFFECTS OF OVER EXPOSURE  
-----

Swallowing: ACUTE ORAL LD50 (RATS) MALE = 6390 MG/KG,  
FEMALES 2870 MG/KG.  
Skin Absorption: NOT DETERMINED, MAY BE HARMFUL IF ABSORBED  
THROUGH SKIN.  
Inhalation: NOT DETERMINED, MAY CAUSE IRRITATION TO THE  
UPPER RESPIRATORY TRACT.  
Skin contact: PROLONGED SKIN CONTACT MAY CAUSE MILD  
IRRITATION.  
Eye Contact: SEVERELY IRRITATING BUT INJURY REVERSIBLE IN  
LESS THAN 21 DAYS.  
Chronic Effects: NONE CURRENTLY KNOWN.  
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES  
-----

Swallowing: IF SWALLOWED, IMMEDIATELY CALL A PHYSICIAN OR  
POISON CONTROL CENTER. DO NOT INDUCE VOMITING.  
Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER. IF  
IRRITATION DEVELOPS. CONSULT A PHYSICIAN.  
Inhalation: MOVE TO FRESH AIR IF IRRITATION IS NOTED.  
CONSULT A PHYSICIAN IF IRRITATION PERSISTS.  
Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING  
EYELIDS OPEN. IF IRRITATION DEVELOPS, CONSULT A  
PHYSICIAN.  
Notes to Physician: THERE IS NO SPECIFIC ANTIDOTE FOR THIS  
MATERIAL. TREATMENT OF OVER EXPOSURE SHOULD BE  
DIRECTED AT THE CONTROL OF SYMPTOMS AND THE  
CLINICAL CONDITION OF THE PATIENT.

-----  
VI. REACTIVITY  
-----

Stability: Stable  
Conditions to Avoid: EXCESSIVE TEMPERATURES AND OPEN FLAMES.  
Polymerization: Will Not Occur  
Conditions to Avoid: NONE CURRENTLY KNOWN.  
Incompatibility material: STRONG OXIDIZING AGENTS, BASES, ACIDS,  
ETC. COPPER REPRESENTS THE GREATEST  
CONTAMINATION HAZARD.  
Hazardous Combustion: MAY PRODUCE AMMONIA, OXIDES OF NITROGEN AND  
OXIDES OF CARBON UNDER FIRE CONDITIONS.

-----  
VII. SPILL OR LEAK PROCEDURES  
-----

Spill or Leak Proc: DIKE AND ABSORB SPILL WITH AN ABSORBENT SUCH AS

Material Safety Data Sheet

Effective Date: 14-JUN-2006  
Product: TRANSACTIVE

-----  
CLAY, SAND, OR SAWDUST. TRANSFER TO SUITABLE CONTAINERS FOR PROPER DISPOSAL. FLUSH SPILL AREA WITH WATER, ABSORB AND PLACE IN SAME CONTAINERS WITH OTHER MATERIAL.  
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT.  
-----

VIII. SPECIAL PROTECTION INFORMATION

-----  
Respiration: IF SPRAY IS PRESENT, USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION.  
Ventilation: LOCAL EXHAUST SUFFICIENT  
Gloves: RUBBER  
Eyes: CHEMICAL WORKERS GOGGLES.  
Other: EYE WASH STATION, IMPERVIOUS APRON AND FOOTWEAR.  
-----

IX. SPECIAL PRECAUTIONS

-----  
Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED OR CONSUMED BY HUMANS OR ANIMALS. DO NOT CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR PONDS.  
Other precaution: CONTAINS 15-25% AMMONIUM NITRATE, CAS#6484-52-2  
-----

X. SHIPPING INFORMATION

-----  
Shipping name: NON-DOT REGULATED  
Hazard Class: NONE  
Identification No: NONE  
Labels Required: NONE REQUIRED  
Placarding: NONE REQUIRED  
Freight Class: ADJUVANT, SPREADER OR STICKER, LIQUID, NOIBN  
Chemical Name Equivalent R.Q.  
-----  
NOT APPLICABLE NOT APPLICABLE  
-----

XI. GENERAL PRODUCT INFORMATION

Helena Chemical Company  
PH: 901-761-0050  
CHEMTREC: 800-424-9300

14-JUN-2006 15:18:01  
Page 4 Of 4

Material Safety Data Sheet

Effective Date: 14-JUN-2006  
Product: TRANSACTIVE

-----  
National Fire Protection Association Rating:  
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum

Health: 1                      Fire: 0                      Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y                      Delayed (Chronic) Health: N  
Sudden Release of pressure: N                      Fire: N  
Reactive: N

-----  
Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017  
Helena Chemical Company believes that the data contained herein is factual.  
This data is not to be taken as a warranty or representation of legal  
responsibility. It is offered solely for your consideration, investigation  
and verification.