

MATERIAL SAFETY DATA SHEET

Last Updated : 12 March, 2013

1. PRODUCT AND COMPANY IDENTIFICATION

▪ PRODUCT DETAILS

Product code : 25411, s25411

Product name : FastMix/Frenche™ (i-StarTaq)

▪ COMPANY INFORMATION

iNtRON Biotechnology, Inc.

Room 1007 Jungang Induspia V, Sangdaewon-Dong,

Jungwon-Gu, Sungnam-Si, Gyunggi-Do, 462-120

KOREA

Tel. : +82-31-739-5737 Fax.: +82-31-739-5264

2. COMPOSITION / INFORMATION ON INGREDIENTS

▪ CONTAINING : HAZARDOUS AND/OR REGULATED COMPONENTS

| CHEMICAL NAME | CAS NO. | WEIGHT % | HAZARDOUS |
|--------------------|-----------|----------|-----------|
| Orange G | 1936-15-8 | 0.01~1% | No |
| Potassium chloride | 7447-40-7 | 5~20% | No |
| Ammonium Sulfate | 7783-20-2 | 1~10% | NO |
| Tris | 77-86-1 | 1~10% | NO |
| Magnesium chloride | 7786-30-3 | 0.1~1% | NO |

3. HAZARDS IDENTIFICATION

THE PRODUCT IS CLASSIFIED AND LABELLED IN ACCORDANCE WITH DIRECTIVE 1999/45/EC

CLASSIFICATION :

INDICATION OF DANGER :

Not hazardous

4. FIRST AID MEASURES

GENERAL INFORMATION: No special measures required.

AFTER INHALATION: Supply fresh air; consult doctor in case of complaints.

AFTER SKIN CONTACT: Generally the product does not irritate the skin.

AFTER EYE CONTACT: Rinse opened eye for several minutes under running water.

AFTER SWALLOWING: If symptoms persist consult doctor.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: dry chemical

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS: Not required.

MEASURES FOR CLEANING/COLLECTING:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

ADDITIONAL INFORMATION: No dangerous substances are released.

7. HANDLING AND STORAGE

HANDLING:

INFORMATION FOR SAFETY HANDLING: No special measures required.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES: No special measures required.

STORAGE:

REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES: No special requirements.
INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY: Not required.
FURTHER INFORMATION ABOUT STORAGE CONDITIONS: None.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

ENGINEERING MEASURES ENSURE ADEQUATE VENTILATION, ESPECIALLY IN CONFINED AREAS

Personal protective equipment

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment

Hand protection impervious gloves.

Eye protection safety glasses with side-shields

Skin and body protection Lightweight protective clothing.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice degradation.

9. PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

FORM: Clear solution

COLOR: Colorless

ODOR: Odorless

CHANGE IN CONDITION

MELTING POINT/MELTING RANGE: 770~773°C

BOILING Point/BOILING RANGE: 1407 °C

FLASH POINT: None

10. STABILITY AND REACTIVITY

THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED: No decomposition if used according to specification.

DANGEROUS REACTIONS: No dangerous reactions known.

DANGEROUS PRODUCTS OF DECOMPOSITION: No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

PRIMARY IRRITANT EFFECT:

ON THE SKIN: Toxic in contact with skin. Components of the product may be absorbed into the body through the skin.

ON THE EYE: Risk of serious damage to eyes.

SENSITIZATION: No information available.

ADDITIONAL TOXICOLOGICAL INFORMATION:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

12. ECOLOGICAL INFORMATION

GENERAL NOTES:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

PRODUCT:

RECOMMENDATION:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

UNCLEANED PACKAGINGS:

RECOMMENDATION: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

IATA

PROPER SHIPPING NAME: Not classified as dangerous in the meaning of transport regulations

HAZARD CLASS: No information available

SUBSIDIARY CLASS: No information available

PACKING GROUP: No information available

UN-NO: No information available

15. REGULATORY INFORMATION

IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS, THE PREPARATION IS NON-DANGEROUS IN ACCORDANCE WITH DIRECTIVE 1999/45/EC.

INDICATION OF DANGER: not hazardous

R-PHRASE(S)

No information available

S-PHRASE(S)

INTERNATIONAL INVENTORIES

| CHEMICAL NAME | EINECS | ELINCS | PICCS | ENCS |
|---------------|--------|--------|-------|--------|
| | Listed | | | |
| | TSCA | CHINA | AICS | KECL |
| | | Listed | | Listed |

16. OTHER INFORMATION

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End of Safety Data Sheet